# A Temporal Analysis of Organic and Inorganic Suspended Sediment Flux from the Lower Big Creek Drainage, Frank Church Wilderness, Central Idaho

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## Abstract

Water quality in streams is a concern because there are direct ties between aquatic organisms and their environment. The suspended sediment load in a stream is one measure of water quality. Watersheds that experience declines in water quality from increased sediment concentration could experience negative impacts on aquatic organisms. Many rivers in Idaho have monitoring stations that measure stream data like discharge, stage height, and temperature. Some monitoring sites are equipped to measure turbidity, which is a surrogate for the suspended sediment load. One such monitoring site is located at the Taylor Ranch Wilderness Field Station on lower Big Creek in central Idaho. The site in the middle of the Frank Church River of No Return Wilderness offers a unique location for researching water quality. The region is without the normally present anthropogenic influences and the field station has existing stage height and turbidity monitoring equipment. In May of 2009 a ten week stream sampling project began on lower Big Creek just prior to the peak of spring discharge and continued until mid July when flows approached base level. A high frequency of sampling quantified stream sediment concentrations across a variety of stream discharges and allowed for the exploration into the driving forces behind sediment levels. The mainstem of Big Creek and three tributaries were sampled daily, some several times daily with automated samplers, while three other tributaries were sampled on a weekly basis. We found that Big Creek and Rush Creek have sediment concentrations that rise with increases in discharge and fall as discharge decreases, not exhibiting hysteresis. Rush Creek, which partially burned in 2008, was the only tributary in the study to show a spike in sediment following a precipitation event in early June. The event, compared to the previous 24 hours, caused an 875% and 1132% increase in organic and inorganic sediment concentration respectively, was captured by the automated samplers between midnight and 6 AM. The increase is thought to be due to fire-forced sediment instability. For all streams, the inorganic sediment concentration rises with the spring runoff and declines as discharge returns to baseflow. In contrast, organic sediment concentrations maintained steady levels through the spring and summer, despite declines in flow. This study also demonstrated that streams with larger drainage areas have larger sediment concentrations. The results of this research could be incorporated into a baseline for future studies attempting to recognize climatically driven changes in sediment load.

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# 1. Introduction

## 1.1 Fire, Climate, and Sediment

In mountainous regions, changes in average temperature, precipitation, and snow pack can influence annual hydrographs and stream sediment concentrations. Climatologist have predicted that the northern Rockies may receive more winter time precipitation, but the temperatures are expected to be warm enough that more winter precipitation will fall as rain rather than snow (IPCC 2009). This leads results in reduced snowpack and an earlier spring melt, often with lower peak discharge.

A consequence of earlier snowmelt, vegetation emerges earlier and with warming summer temperatures, vegetation dries out sooner in the season, becoming fuel for wildfire. Westerling et al. (2006) has shown that 56% of wildfires occur in years with early snowmelt. Wildfires, depending on severity, can consume all vegetation and leave only ash at the soil surface (Kunze 2006). In severe fires the soils may be heated to the point of becoming hydrophobic and promoting surface flow of precipitation rather than infiltration. In the first 1-2 years following a fire, sediment yields from increased erosion may increase by one or more orders of magnitudes compared to unburned regions (Kunze 2006)

Climate change not only has the potential to alter hydrologic regimes, but also has the potential over time to alter entire ecosystems (Sala et al. 2009). Changing climate can alter the natural distribution of species or communities sometimes it may be possible for species or communities to migrate poleward or in altitude in response to changing conditions (Earthwatch Institute 2010). In some regions climate change "creates conditions that may be suitable for some invasive species to become established in new areas." (Earthwatch Institute 2010)

In the intermountain west we have seen non-native cheatgrass, *Bromus tectorum*, invade mountain regions as well as sage steppe ecosystems (Young 1995). Cheatgrass has increased fire frequency to the point that native shrub–steppe species cannot recover (Brooks 2004). The US Forest Service inventoried the Frank Church Wilderness in 2002 and found 4,222 acres on 471 sites within the wilderness boundary to be weed-infested (USFS 2007). They now have a noxious weed treatment program focused around the backcountry trails (USFS 2007).

Wildfires in the Frank Church River of No Return Wilderness have consumed ponderosa pine forests, sagebrush grasslands, and areas that are cheatgrass infested. Fire suppression in this wilderness only occurs around the few remote structures scattered throughout the 2.3 million designated acres. There is a diverse fire history near the Taylor Ranch Wilderness Field Station (TRWFS) located on Big Creek in the middle of this wilderness area. Major fires near the TRWFS have occurred in 1984, 1988, 2000, 2006, and 2008 (Akenson 2009). "Because of its flammability, cheatgrass greatly increases the fire hazard on a site. It can change the fire recurrence interval from the natural 20 to 100 years for sagebrush grassland ecosystems to 3 to 5 years for cheatgrass-dominated sites." (Ypsilantis 2003)

Cheatgrass may increase the frequency of fire in the Big Creek drainage, which may have dramatic impacts to sediments in streams below burned areas. Precipitation falling on newly burned areas tends to have more overland flow, and increased erosion, which "is a dominant response to wildfire in the Interior Northwest and Northern Rocky Mountains" (Wondzell 2003). Additionally, steep topography, like that of the Big Creek drainage, is more prone to mass wasting once burned (Wondzell 2003).

A mass wasting event can deliver large volumes of sediment to streams if the material reaches an active channel. However, fine sediment and organic matter delivered from overland erosion could have more impacts to aquatic habitat than the coarser material involved in a debris flow (Wondzell 2003). Streams have strong responses to changes in runoff, which can influence stream biodiversity (Sala et a. 2009). Increased sediments that settle on the streambed can bury fish spawning beds. Suspended sediments also absorb heat and raise water temperature, which reduces dissolved oxygen as it, becomes less soluble. Additionally, suspended sediments can block needed light to aquatic macrophytes and reduce their oxygen inputs to the water column from photosynthesis.

It is of value to examine the role of climate, fire and invasive species on sediment delivery to streams in a setting that is nearly void of anthropogenic activity. A better understanding of how landscapes are impacted, respond to and recover from climate and fire induced changes in sediment concentration helps us better prepare for changes in more anthropogenically influenced areas. This study set out to collect stream water samples from May to July to quantify the sediment concentrations in several streams near the TRWFS. We expected to find that as discharge increased sediment concentrations would increase. We also expected to find that drainages with the most recent fire history would show higher levels of sediment. Since south-facing drainages typically have more grass and less woody vegetation it was expected that they would have higher sediment concentrations than north facing drainages. We hoped that federal agencies that fight fire, manage fish and wildlife, and manage forest recreation will be able to use the data from this study to enhance their decision making process.

## 1.2 Previous Investigations

An initial study on the sediment concentrations in the lower Big Creek watershed took place in the summer of 2008. Eric Carlson, a DeVlieg undergraduate research scholar from Idaho State University, found that sediment concentrations in the local streams tended to rise and fall with water discharge. This is not characteristic of most streams. Most streams have a rise in sediment concentration as discharge increases but the concentration drops while discharge values remain high. This is referred to as hysteresis. Carlson was also looking at the role of forest fire on sediment regimes and because there were no accessible unburned control streams, his results were inconclusive. Research was continued in the summer of 2009 to reaffirm that Big Creek does not show hysteresis sediment concentrations and to determine if a late season 2008 fire would play a role in sediment delivery in the summer of 2009.

Modifications to last year's research included decreasing the spatial extent, increasing the temporal resolution of sampling, and looking at the roles of aspect and wildfire history on sediment delivery. On Big Creek an automated sampler was used to better calibrate to the NOAA turbidity sensor. Additionally, sediment concentrations could be estimated from the stage height sensor mounted under the Big Creek bridge by converting stage height to discharge and correlating discharge values to sediment concentrations. The stream gauging of Big Creek and the studied tributaries were conducted by Neil Olson, a M.S. Geology student from Idaho State University, in the summers of 2008 and 2009.

# 2. Methods

## 2.1 Field Setting

All samples were collected in the Frank Church River of No Return Wilderness in central Idaho. The area is dominated by steep, mountainous terrain, and exhibits a typical snow-driven annual hydrograph. Areas that have escaped recent fire have ponderosa pines on north-facing slopes and grasses and brush on south-facing slopes. The areas within the sampling radius that have burned recently have brush, grasses, dead timber falls, as well as dead standing timber. Historical landslide dams have left behind large benched deposits of fluvial sediments within the lower Big Creek drainage (Eversole 2008). The TRWFS has an average annual precipitation total of 37 cm, most of which occurs from April to June. Record precipitation was recorded for the month of June at the TRWFS. According to the Idaho Department of Water Resources the snowpack (snow water equivalent) was at 98% for the Salmon River drainage prior to spring runoff . The peak spring runoff discharge on Big Creek occurred on May 19th, 2009 at 138 $m^3$/second and at the conclusion of sampling, discharge was down to 12 $m^3$/second (Olsen and Crosby 2009). A total of seven streams were sampled, all residing within a 6 km radius of the TRWFS (Figure 1). Big Creek, Rush Creek, Pioneer Creek, Cougar Creek, Cliff Creek, Goat Creek, and Dunce Creek, listed in descending discharge, were sampled. Three tributaries of Big Creek along with Big Creek were sampled on a daily basis from May 21st until June 15th and then sampled every other day (Table 1). Cougar, Goat, and Dunce creeks were sampled weekly. Additionally Big Creek and Rush Creek had automated samplers.

## 2.2 Field Sampling Methods

For Pioneer, Cliff, Cougar, Goat, and Dunce Creeks, the same sample location was used through the entire period of sample collection. Rush Creek was sampled by walking across a large tree that lay across the river (Site 1 in Table 1) from the start of sampling through June 11th. From that day until the conclusion of sampling, the site was located 600 meters downstream at a site suitable for safely wading across the stream (Site 2 in Table 1).

### 2.2.1 Isokinetic Manual Sampler

Sample proceedures on all creeks, aside from Big Creek, used a depth integrating isokinetic manual water sampler (Figure 2). This is an engineered plastic bottle with specialized inlet nozzles designed for specific stream velocities. Using the correct size nozzle allows water and suspended sediments to flow unimpeaded into the sampling bottle rather then be sucked in or forced aroud the opening. The bottle was attached to a six foot long aluminum sampling rod. The bottle was maunually lowered and raised in vertical columns across the width of each creek to obtain a depth and width averaged sample that is representative of the entire channel (FISP 1940). Samples from the isokinetic bottle were transferred to 500mL sanitary white plastic bottles. Following each sample the isokinetic bottle was cleansed with dionized water. Samples were promptly returned to the laboratory at the

Taylor Ranch Wilderness Field Station and either stored temporarily in a dark, cool metal cabinet or immediately processed.

### 2.2.2 Isokinetic Bridge-Based Sampler

Samples from Big Creek were collected from the bridge at the Taylor Field Station. They were obtained using an isokinetic sampler that was hand-cranked up and down from the top railing of the bridge using a bridgeboard and cable reel (Figure 3). This sampling device has a 30 pound aluminum housing that is threaded to accept variable sized nozzles and has a 1000mL plastic sample bottle within. This device was used because the high discharge and depth of Big Creek makes hand sampling impossible. Initially, eleven vertical columns were sampled and then as flows declined and the channel narrowed that number were reduced. By the end of the sampling period in July seven vertical columns were used because the river had narrowed. After each lowering and raising of the sampler the bottle was removed and its contents poured into a clean five gallon bucket. Once all the samples were poured into this bucket, a single 500mL sample was drawn from the bucket using a valve on the side located just above the bottom of the bucket. While drawing this integrated sample the water and sediment in the bucket was agitated to keep sediments suspended and ensure a representative sample.

### 2.2.3 Automatic Pump Sampler

Automated samplers were placed on Big Creek and Rush Creek since they are the two largest streams in the study area. The high frequency of sampling was used to produce more data and faciliate the calibaration of a NOAA turbidity sensor. The ISCO samplers held 24 500mL bottles in the base and the top housed a programming keypad (Figure 4). A 15 to 20 foot long clear plastic suction line was run from the ISCO the creek and secured to two pieces of rebar that were driven into the creek bed. The inlet for the suction line was placed from 15 to 30 cm above the creek bed to prevent the collection of fine bedload. Both creeks were programmed to collect a 125 mL sample every 90 minutes. Four samples went into each 500mL bottle and represented 6 hours of sampling. ISCO bottles were changed out every 6 days with new sanitary bottles. Batteries on the ISCO units were replaced with a fully charged battery approximately every 3 weeks. The automated samplers were checked every day or every other day to remove debris from around the inlet or to move the inlet farther into the stream channel as water levels declined. The ISCO sampled from May 22$^{nd}$ to July 22$^{nd}$ on Big Creek and from May 22$^{nd}$ to July 11$^{th}$ on Rush Creek.

### 2.2.4 ISCO Calibration

Since automated samplers only collect stream water from one point in the stream and do not represent the width and depth average of the stream, a calibration was done. Each time a manual sample was collected either with the isokinetic sampler on Rush Creek or Big Creek, then an automated sample was pulled at the same time to calibrate the sampler. Linear regression was used to then calibrate all ISCO samples to manual isokinetic samples. See section 3.1 for results.

## 2.3 Sample Preparation

Samples were processed in a lab facility located at Taylor Ranch Field Station. Each sample, containing both liquid and sediment, was initially measured for volume using a graduated cylinder. Each sample was then poured into a reservior and vacuumed through a pre-weighed filter to trap the sediments and remove the water from the sample. The graduated cylinder was rinsed with de-ionized water and poured into the reservoir to ensure all sediment was removed. Sedimented filters were placed in a 1 mL plastic vial, sealed, and labled. Vials were placed in Zip-Loc bags and kept in a freezer for the duration of the field work to prevent the growth of organic matter.

## 2.4 Sample Analysis

At the conclusion of field work the samples were transported to Idaho State University. Each sample was thawed, unfolded, and placed into a pre-weighed tin weigh boat. De-ionized water was used to rinse out any remaining sediment in the tube. Then each filter and its weigh boat were weighed. Samples were placed on cookie sheets and put in a 55-60 degree Celcius "wet" drying cabinet for 24 hours, then a 55-60 degree Celcius "dry" drying cabinet for 24 hours and then weighed. This two-stage proceedure removes all the water from the sample and leaves the remaining sediment (both organic and inorganic) on the filter. In order to determine the proportions of inorganic and organic, the organic sediment is removed through cumbustion. This was done at 400 degrees Farenheight for 4 hours. With the organic matter burned off , those samples were rehydrated with de-ionized water and dried for another 48 hours before taking the final weight to determine inorganic mass.

Normally the filters would be pre-ashed before use, which typically reduces the mass of the filter. However this procedure was not done due to miscommunication. When several sediment concentrations returned with negative values it was assumed that it was a loss in filter mass. In order to determine the average filter mass lost through sampling procedures a control run was done. Ten un-ashed filters were placed on the vacuum filter and had 500mL of de-ionized water passed through them. The filters then went through the same drying and ashing procedure and were weighed. The average amount of mass lost (0.00083g) was then added to the weights of all samples (Table 2). Samples that still had negative values after the adjustment were discarded. Inorganic sediment values are determined by subtracting the weigh boat and filter mass from the final mass. Organic sediment values are difference between initial dry weight and final weight.

## 2.5 Turbidity Calibration

The sediment concentrations for Big Creek were plotted against corresponding NOAA turbidity sensor readings. Linear regression was use to find the relationship between manually derived sediment concentration and turbidity readings. See section 3.5 for results.

## 2.6 Precipitation Data

Precipitation records have been kept at the Taylor Ranch since the early 1970's. Records were obtained from the Ranch managers for the months of May, June, July, and August of 2009. Additionally 6 rain gauges were installed, two in each drainage for Cliff, Pioneer, and Rush creeks. The Stratus STRG-11 gauge was used and mineral oil was placed in the collection tube to prevent evaporation between readings. Each rain gauge was placed in an open area, away from trees, and within 1 km of the stream sampling site. Water levels in the gauge were recorded directly following precipitation events (Appendix A).

# 3. Results and Discussion

## 3.1 Calibration of Automated Samplers

For Big Creek, the automated sampler under-registered sediment concentrations (Figure 5A). This is perhaps due in part to incomplete mixing of the upstream Pioneer Creek or the inlet location on the edge of the channel. In general, stream velocities decline as you move toward the stream bank which results in less suspended sediments as particles drop out of suspension because of the reduction in velocity. The Big Creek automated samples were calibrated with the following equation y= 2.082x – 5.0291. The total combined sediment concentration on Rush Creek had a near one to one relationship with the automated sampler yielding y= 0.9804x + 3.949 and an $R^2$ of 0.8803 (Figure 5B). Rush Creek's automated sampler may have had a better representation of actual sediment load because the stream discharge was lower than Big Creek allowing the inlet to be placed further out into the channel (Figure 6).

## 3.2 Relationship Between Water and Sediment Fluxes

### 3.2.1 Inorganic Sediment Rating Curve

The suspended inorganic sediment concentration in the Big Creek drainage shows a positive correlation between discharge and concentration (Figure 7A). Carlson and Crosby concluded in 2009, following data collection in 2008, that Big Creek does not follow the typically hysteresis pattern of the regions streams but rather concentrations rise and fall with discharge. Desilets et al. (2007) found that hysteresis did not occur in post wildfire test plot. Big Creek was similar to the test region with steep rugged mountains composed of granite and gneiss, with thin soils, and recent wildfire. With the addition of an ISCO sampler on Rush Creek, and over 200 samples collected, it was found that Rush Creek also follows the character of Big Creek by carrying more inorganic sediments as discharge increases (Figure 8A). This may be due to an inexhaustible supply of sediment, possibly from the sediment benches established following landslide dams. Big and Rush Creeks may have the needed shear stress with their higher discharges to access those sediments and transport then downstream.

### 3.2.2. Organic Sediment Rating Curve

It was inconclusive whether discharge has any control on the organic sediment concentrations in all study streams since the concentrations show a scattering of values despite changes in discharge (Figure 7B). For instance, organic concentrations for Big Creek are similar when discharge is $10m^3$/sec and $100m^3$/sec (Figure 8B). However, it was found that Big Creek contained the highest concentrations of organics at higher flows for all the studied streams.

## 3.3 Temporal Analysis of Suspended Sediments

### 3.3.1 Inorganic Concentrations and Yields

Inorganic concentrations were high during the peak runoff period and then declined as discharge declined (Figure 9A). The greatest discharge on Big Creek occurred on May 31$^{st}$ with a flow of 133.5 $m^3$/sec , producing a sediment concentration of 318.1 mg/L (Appendix B). The highest concentrations were not as a result of peak flow but rather following a summer rain storm on June 3rd that produced 0.4 cm of local rainfall (Appendix A). The ISCO sampler on Big Creek collected an integrated sample between midnight on the 3rd and 6 am on the 4th that had a concentration of 1226.6 mg/L, the highest during the sample collection period. At the time that sample was collected, the discharge in Big Creek was down to 101.3 $m^3$/sec. That was a 24.2% drop in discharge but an increase of 3.85 times the inorganic sediment concentration.

The peak discharge for Rush Creek also occurred on May 31st at 9.78 $m^3$/sec with a concentration of 32.4 mg/L. Following the rain event discharge was down to 8.9 $m^3$/sec but the inorganic concentration soared to 304.5mg/L, an 1132% increase from the previous day. Visual observations at confluence of Rush Creek and Big Creek on the morning of the 4th showed Rush Creek had turned a blackish color, in contrast to the milky brown Big Creek (Figure 10). An aerial pass over the northern region of Rush Creek the following week revealed a portion (under 5%) of the Rush Creek drainage had been severely burned during a 2008 fire. While no landslide was visible, it did appear that a moderate amount of erosion had taken place along one south facing hillside and that the ground in the area was covered in either ash or charcoals. The initial response after a fire is an increase in fine sediments from ash created by burned vegetation that can be several cm thick (Desilets 2007). Subsequent rainfall during the study period that was equal to or exceeding the June 3rd level did not produce blackish waters. In fact, Rush Creek tended to appear clearer than Big Creek during the falling limb of the hydrograph.

The remaining streams did not show any spikes during the June 3rd-June 4th time frame, including Pioneer and Cliff that were sampled midday on the 4th. This was expected since wildfires have not occurred in any of those drainages since 2006. Typically there is an initial increase in sediment the first year following a fire but after 5 years sediment concentrations have recovered to pre-fire levels (Wright and Bailey 1982)

Big Creek seemed to experience a hysteresis response following the June 3rd rainfall. While inorganic sediment concentrations peaked at 1226.6mg/L on the 4th there was a steady decline in concentrations until June 14th when levels were at 23.9 mg/L before rising again. During that ten day period the rain gauge operated at the Taylor Ranch recorded 1.21 inches of rainfall. The three rain gauges used in this study also recorded similar values. During that period discharged dropped from roughly 93 $m^3$/sec down to around 73 $m^3$/sec. It seems plausible that it took ten days for more sediment to available for transport into Big Creek.

The trend for inorganic specific sediment yield in all streams is to decline over time with falling discharges (Figure 11A). The inorganic specific sediment yield is highest for the two largest streams, Big and Rush Creeks, during most of the sampling period (Figure 12A). This concurs with the findings from last season by Carlson and Crosby (2008). Big Creek tends to have 3 to 5 times the sediment as Rush Creek. Rush contains 2 to 3 times the sediment of lesser tributaries during the study period. Therefore it could be concluded that drainage area plays a leading role in the amount of inorganic suspended sediment .

### 3.3.2 Organic Concentrations and Yields

Organic concentrations in all streams had mild declines through the course of the summer, aside from some daily variation and spikes following precipitation (Figure 9B). Organic concentrations did not peak during runoff and decline through the summer but rather maintained levels in the range of 1 to 10 mg/L. Goat Creek, despite having the lowest discharge, had organic concentrations similar to Big Creek. This may be an error due to the sampling location being 120 meters in elevation below where stream gauging took place. Gauging took place above a large nick point while water samples were collected below. Therefore the possibility of hyporheic upwelling and downwelling may alter the amount of discharge at the water sampling location and thus impact the actual sediment concentration.

In the five smallest tributaries there were no spikes in organic sediments following rain event. Typically a year or more after a fire the soil infiltration rates are no longer restricted by hydrophilic soils which helps to reduce overland flow, rill formation, and sediment delivery to stream (MacDonald 2004). Since none of those streams had fire in the last year it was not surprising that precipitation events did not introduce higher levels of sediment. However, there was a spike in organic levels in Rush and Big Creek on June 4$^{th}$ as well as other days of rain events. The June 4$^{th}$ spikes produced a concentration 35.1 mg/L in Rush Creek when prior it was running between 3-5mg/L, an over 800% increase. Big Creek spiked at 144.7 mg/L, rising from a level of 6.5 mg/L the day before. Since Rush Creek was the only tributary to show a spike on June 4$^{th}$ and it had burned the previous summer it is reasonable to conclude that the burned area was a significant source of organic sediment.

The plot for all streams specific sediment yield of organic matter show that it does not trend with discharge like inorganic sediments (Figure 11B). Instead, organic yields seem to maintain steady levels with some daily fluctuation. The organic specific sediment yields in Big Creek at the start of sampling, May 21 to June 3, on average were nearly 900 mg/L/km$^2$ while Rush Creek was only 132 mg/L/km$^2$ (Figure 12B). During the last two weeks of sample collection Big Creek was down to 94.6 mg/L/km$^2$ while Rush had reached average levels of 24.0 mg/L/km$^2$ during the month of July.

### 3.3.3 Proportions of inorganic and organic concentrations

In Big and Rush Creeks the percent of organic sediment to inorganic increases during the summer sample period (Figure 13A). At the time of peak flow organic sediments only account for around 10% of the total sediment concentration. Beginning in the middle of June organic levels begin to account for more of the sample. This is not because organic levels increase, but rather because inorganic levels decline. By the end of the sample period in July, organic sediments account for the majority of the suspended load. This concurs with Madej et al. (2007) findings of a small coastal stream where the organic sediments were proportionally higher during lower flows. This is because organic sediment has a bulk density typically one third that of inorganic and organic sediment has a greater surface to volume ratio allowing organics to remain suspended at low flows (Sedell 1978). At the start of sampling there is minimal daily variability in the percentage of inorganic to organic sediment. Then by mid June, the day to day variability increases and by the end of sampling there are larger swings in the inorganic to organic balance. For example, on July 11$^{th}$ Big Creek had a sample that was 94% organic and the following day down it was down to 29%. This may be due to higher uncertainties associated with lower concentrations occurring in the late summer. There does not appear to be a diurnal pattern for organic percentages, for instance, organic percentages are not always highest during the day or night.

Additionally, there was a strong inverse relationship between discharge and the percentage of organic sediment concentration for Big Creek and Rush Creek (Figure 13B). Since this is an expression of the ratio of organic to inorganic it can be attributed to physical properties of suspended organic matter allowing organic matter to stay suspended longer during lower discharges. The slope of this inverse relationship is steeper for Big Creek than Rush Creek, which again suggests that discharge controls the ratio. An increase in the temporal sampling of one of the smaller tributaries may confirm this hypothesis.

## 3.4 Insensitivity to Aspect

We had hoped to find a connection between aspect and sediment concentration since most of the south facing slopes in the region are dominated by grasses and shrubs, while north facing slopes have stands of Ponderosa pine and Douglas fir. However, aspect does not appear to be a controlling factor in the amount of inorganic or organic sediment levels since both north and south facing drainages had comparable sediment yields (Figures 14A and B). During sample collection it was noticed that a number of timber stands on north facing slopes had previously burned during wildfire and may be contributing more sediment than a typical north-facing tree covered slope. There were few unburned regions to use as a control, so this question remains unanswered.

## 3.5 Correlation Between Turbidity and Sediment Concentration

A total of 235 Big Creek samples for sediment concentration where plotted against NOAA turbidity sensor readings recorded at the same date and time. Since Big Creek samples are representative of a six hour period with samples taken every 90 minutes, an average of the NOAA turbidity reading over that same time frame was used. The linear regression equation for total combined inorganic and organic sediment with turbidity was $y = 1.6365x + 8.5307$ with an $R^2$ of 0.9055 (Figure 15C). A log v. log plot of that same data yielded a power law equation of $7.2325x^{0.5978}$ with an $R^2$ of 0.8202 (Figure 15F). Plots were also made individually for organic and inorganic concentration versus turbidity with $R^2$ values of 0.8761 and 0.8927 respectively using linear regression (Figures 15A and B). However, a log v. log plot of organic concentration and turbidity yielded a meager $R^2$ value of 0.229 which suggests the turbidity meter is not a useful tool for estimating organic sediment concentrations (Figure 15E). From peak spring flow down to near baseflow we found that inorganic sediment concentration and turbidity follow the same patterns, although the NOAA turbidity sensor returns values less than determined inorganic sediment concentrations (Figure 16A). Nonetheless, the NOAA turbidity meter, when calibrated to suspended sediment, will be a useful tool for annual tracking of the inorganic sediments in lower Big Creek. The plot of organic sediment concentration over the same period again shows that the NOAA sensor is not effective at representing organic levels (Figure 16B).

## 3.6 Precipitation Influences on Discharge

Discharge peaked on May 31st and began to decline until June 3rd when several days of rain caused discharge to level and disrupt the falling limb pattern of the hydrograph (Figure 17). Once the rains end then discharge returns to its previous falling limb. However, in mid June more rains caused another leveling of the hydrograph. Other precipitation events later in the summer show only slightly detectable differences in the hydrograph, which are most likely due to dryer soils, and higher evapotranspiration rates. While there were only 6 rain gauges deployed in 3 drainages, we found that there was not a significant difference between rain gauges despite being in different drainages. We also found that the amount of precipitation recorded for the three drainages was similar to the existing gauge that has been at the ranch for several decades.

## 4. Conclusions

The wilderness setting of the Taylor Field Station offered the opportunity to study the sediment flux in mountain streams without the typical anthropogenic influences found in more accessible regions. In harmony with a previous sediment study we found that Big Creek and Rush Creek sediment concentration correlates well with discharge. Another finding that concurs with the previous seasons research was that Goat Creek has a sediment concentration comparable to Big Creek, despite being significantly lower in discharge.

The utilization of a well-calibrated automated sampler on Rush Creek captured the summer's peak sediment concentration with a sample collected during the overnight hours. This spike in sediment was attributed to destabilization in a region of the Rush Creek drainage that had burned the previous year. No other tributary showed a spike in sediment following the June 4$^{th}$ precipitation event which is likely attributed to those regions not experiencing wildfire in the previous year.

While not expected, it was interesting to discover that the organic sediment concentration in all the studied streams maintained roughly consistent levels through the course of the sample collection period while specific organic sediment yield declined. By the end of sample collection the organic sediment concentrations accounted for the majority of the sediment in the streams. Inorganic sediment concentration and yield both declined during the sampling period. It was inconclusive whether aspect plays a role in the amount of sediment in the six tributaries of Big Creek.

The high frequency of samples on Big Creek allowed for a calibration of inorganic sediment concentration to the NOAA turbidity meter. With this data, the NOAA turbidity meter can now more accurately remote sense the actual suspended sediment load in Big Creek.

Future research in the vicinity of the Taylor Ranch Field Station should consider placing automated samplers on the other two streams near the ranch. By increasing the sampling frequencies on those streams it could be shown whether smaller streams in the Big Creek drainage have sediment concentrations that rise and fall with discharge. If, in the future, wildfire occurs within the study area it would be interesting to track the sediment concentrations above and below a burned area. Furthermore, investigation of a burned area from the ground rather than aerially would offer better examination of post fire sediment transport to a stream. GIS could be used to define new fire boundaries and their area in relation to the total watershed. Remote sensing could determine what types of vegetation exist in the study region, including the extent of cheatgrass and how vegetation type impacts sediment delivery.

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# Tables

Table 1: Summary of sample site and data characteristics.

| Sample location | Sample method | Sample frequency | Number of Samples | Distance from Taylor Station (km) | Sample location (deg. min. sec) | Drainage Area (km) | Wildfire history* | Sample Period (2009) |
|---|---|---|---|---|---|---|---|---|
| Big Creek | Whale | daily | 32 | 0.16 | N 35 6 14, W 114 50 60 | 1444 | 1988, 2000 | 5-22 to 7-27 |
| | Manual Calibration | daily | 26 | 0.12 | N 45 6 14, W 114 51 7 | 1444 | 1988, 2000 | 5-22 to 7-27 |
| | ISCO Automated | multiple | 236 | 0.12 | N 45 6 14, W 114 51 8 | 1444 | 1988, 2000 | 5-22 to 7-22 |
| Rush Creek | Isokinetic Manual (Site 1) | daily | 13 | 1.4 | N 45 5 60, W 114 51 45 | 243.4 | 1984, 1988, 2000 2008 | 5-21 to 6-11 |
| | Isokinetic Manual (Site 2) | daily | 17 | 0.8 | N 45 6 15, W 114 51 39 | 243.4 | 1984, 1988, 2000 2009 | 6-12 to 7-24 |
| | Manual Calibration | daily | 23 | 0.72 | N 45 56 17, W 114 51 39 | 243.4 | 1984, 1988, 2000 2010 | 5-21 to7-11 |
| | ISCO Automated | multiple | 210 | 0.72 | N 45 56 17, W 114 51 40 | 243.4 | 1984, 1988, 2000 2011 | 5-22 to 7-11 |
| Cliff Creek | Isokinetic Manual | daily | 38 | 0.35 | N 45 6 20, W 114 50 58 | 18.8 | 1988, 2000 | 5-21 to 7-25 |
| Pioneer Creek | Isokinetic Manual | daily | 35 | 0.26 | N 45 5 59, W 114 51 2 | 15.9 | 2000 | 5-21 to 7-26 |
| Dunce | Isokinetic Manual | weekly | 5 | 6.39 | N 45 6 25, W 114 47 5 | 6.5 | 2006 | 5-23 to 7-2 |
| Goat | Isokinetic Manual | weekly | 7 | 4.38 | N 45 6 25, W 114 48 28 | 7.9 | 2006 | 5-23 to 7-21 |
| Cougar Creek | Isokinetic Manual | weekly | 7 | 3.27 | N 45 6 13, W 114 49 15 | 21.4 | 1988, 2006 | 5-23 to 7-21 |

*Wildfire history was obtained from a personal interview with Jim Akenson, Taylor Research Station Manager for 27 years during the period from 1980-2010.

Table 2. Ten filters had de-ionized water vacuumed through them, then completed the drying and ashing process before achieving a final as mass loss of .00083g.

| | | Taylor Control Run | | | | | | |
|---|---|---|---|---|---|---|---|---|
| control run | filter # | filter weight g | weigh boat g | filter & boat g | oven dried g | dry-tare | furnace dried g | Fdry-tare |
| 1 | 560 | 0.1288 | 0.9928 | 1.1216 | 1.1204 | -0.0012 | 1.1211 | -0.0005 |
| 2 | 559 | 0.1282 | 1.0021 | 1.1303 | 1.1294 | -0.0009 | 1.13 | -0.0003 |
| 3 | 558 | 0.1292 | 0.9766 | 1.1058 | 1.1047 | -0.0011 | 1.1052 | -0.0006 |
| 4 | 557 | 0.1306 | 0.9805 | 1.1111 | 1.11 | -0.0011 | 1.11 | -0.0011 |
| 5 | 556 | 0.1292 | 0.983 | 1.1122 | 1.1107 | -0.0015 | 1.1109 | -0.0013 |
| 6 | 555 | 0.1274 | 0.9752 | 1.1026 | 1.1016 | -0.001 | 1.1018 | -0.0008 |
| 7 | 554 | 0.1289 | 0.9759 | 1.1048 | 1.1036 | -0.0012 | 1.1035 | -0.0013 |
| 8 | 553 | 0.1328 | 0.9799 | 1.1127 | 1.1117 | -0.001 | 1.1116 | -0.0011 |
| 9 | 550 | 0.1297 | 0.9912 | 1.1209 | 1.1199 | -0.001 | 1.1201 | -0.0008 |
| 10 | 549 | 0.1298 | 0.9746 | 1.1044 | 1.1037 | -0.0007 | 1.1039 | -0.0005 |
| | | | | | average | -0.00107 | | -0.00083 |

## Figures

Figure 1. The seven streams sampled in 2009. Taylor Ranch (red star) was the location of the Field Station, Big Creek stream samples, the NOAA turbidity sensor, and the Taylor Ranch rain gauge. Tributary stream sediment sites (brown triangles) and rain gauges (blue circles). Big Creek flows from west to east (left to right).

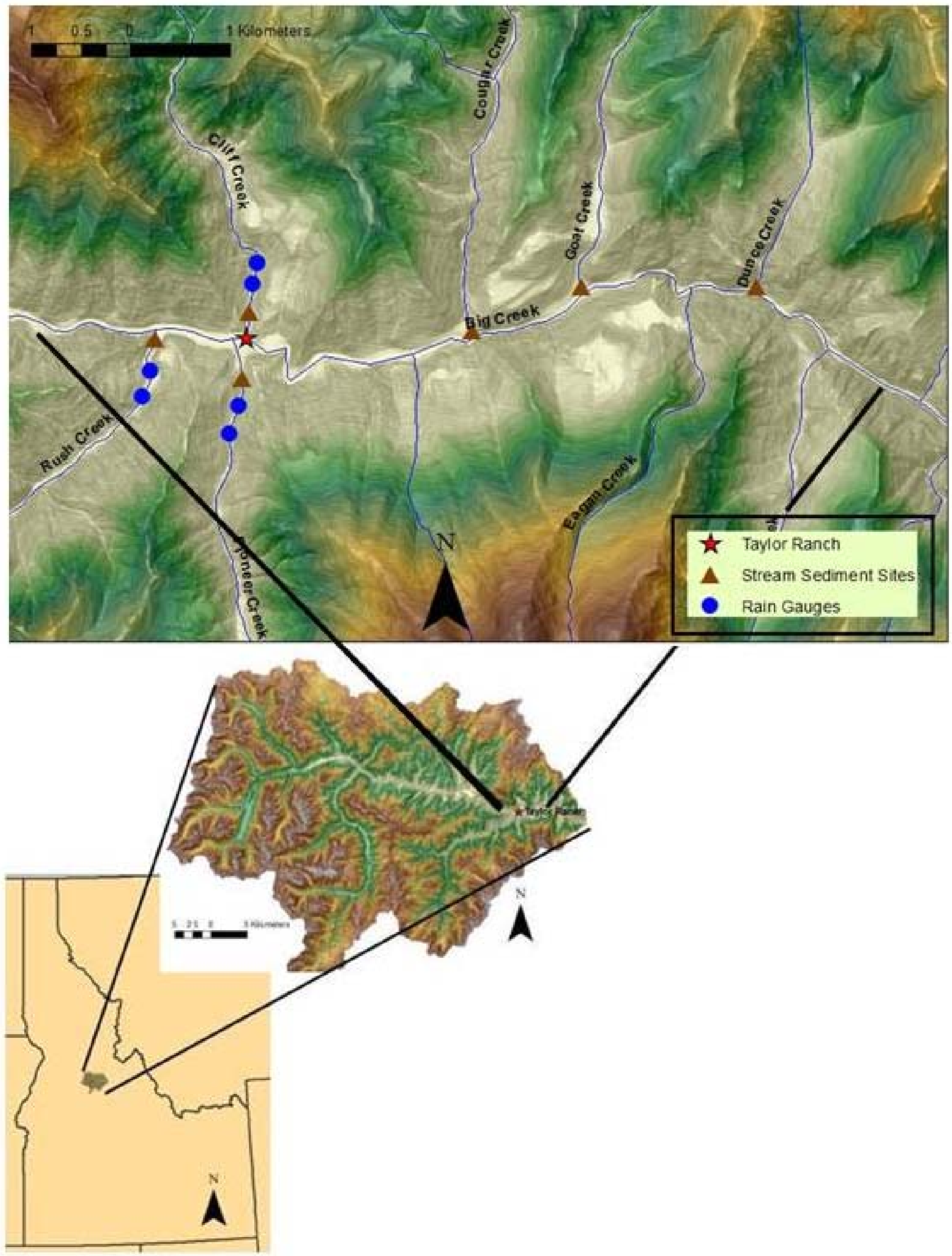


Figure 2. Left, a diagram of the isokinetic bottle sampler.  Right, the vertical columns of an integrated sample (USGS website, Field Manual Chapter 12; Selection of equipment for water sampling).

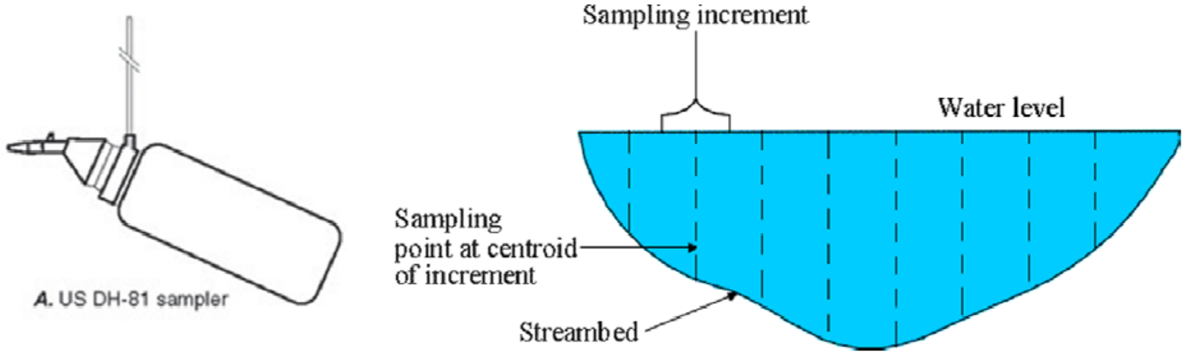
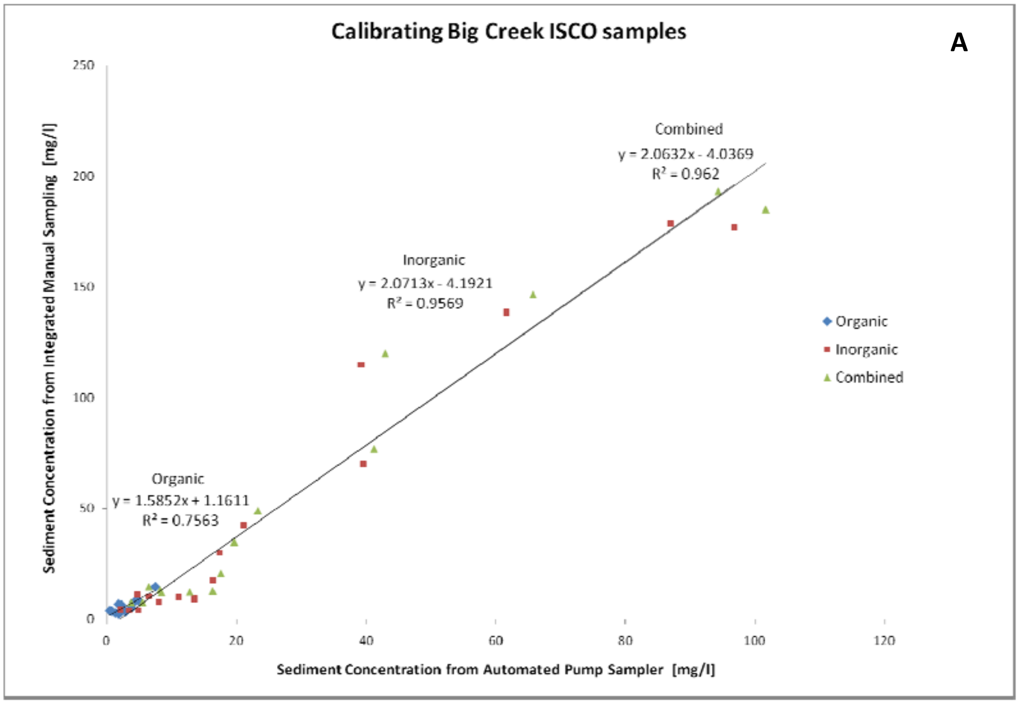



Figure 3. The isokinetic sampler used solely on Big Creek.  The bridgeboard rests on the top railing of the bridge and a cable reel lowered the whale into the water column.  Next to the support leg for the bridgeboard is the integration bucket.

Figure 4. The ISCO sampler shown with the top section removed, exposing the 24 sample bottles. Programming the unit was done using the keypad. The top section has a weather resistant cover, not shown.

Figure 5. Calibration of Automated Samplers from Manual Samples. (A) Big Creek calibration. (B) Rush Creek calibration.



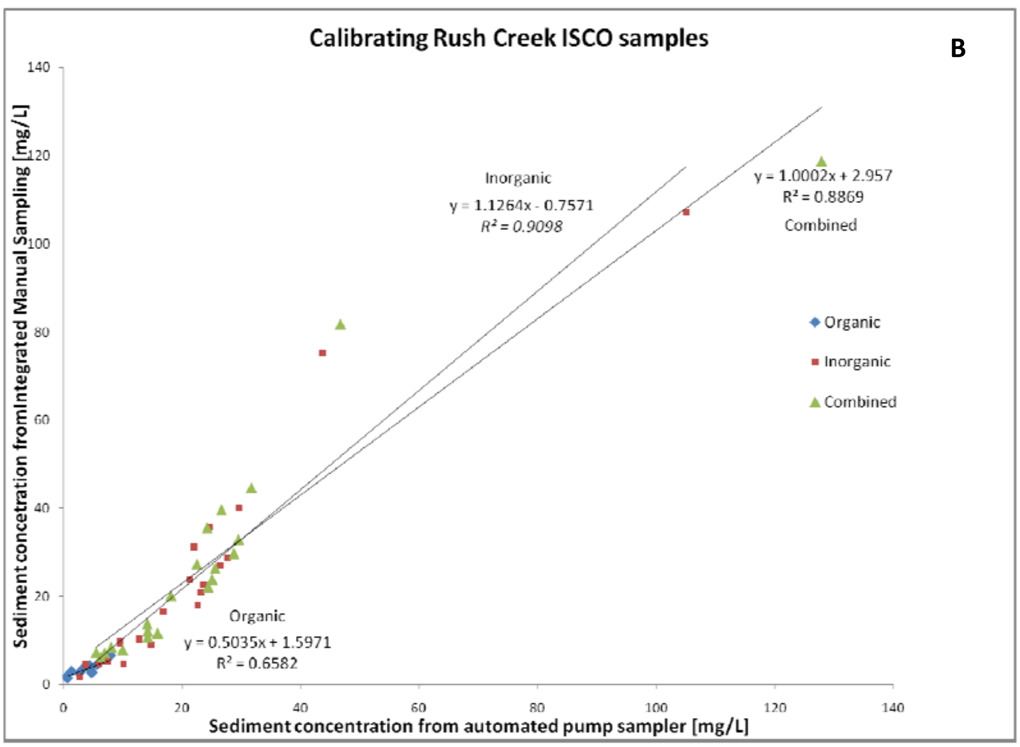



Figure 6. The discharge for all streams during the sampling period. The log of discharge smoothes out much of the daily variablility but reveals the general decline in flow all the falling limb of the hydrograph.

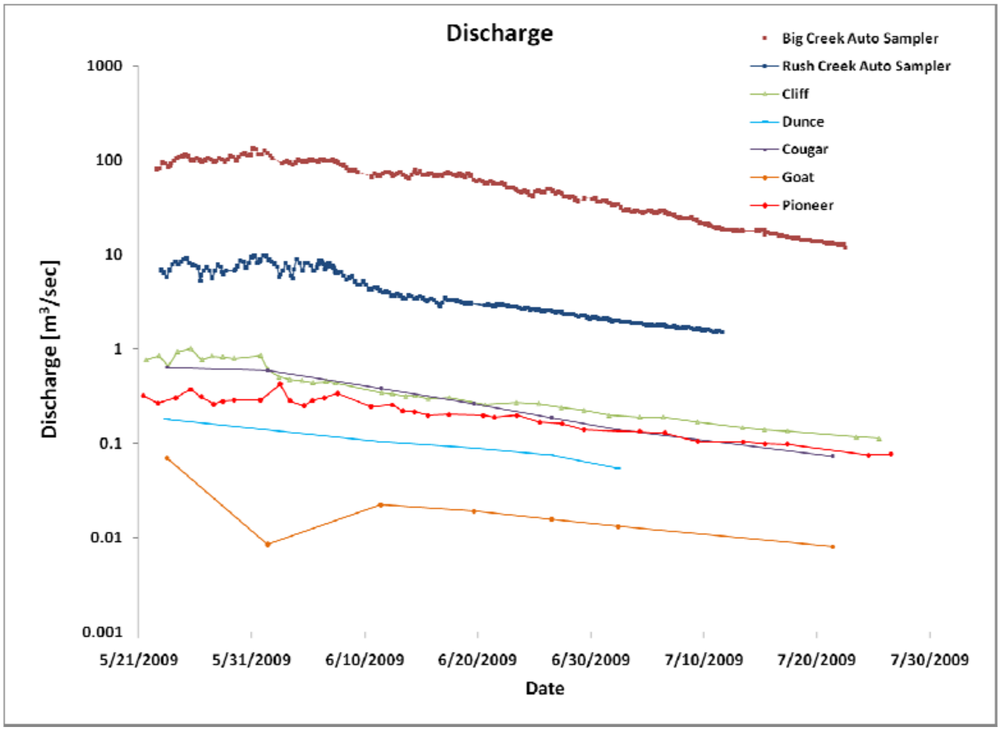
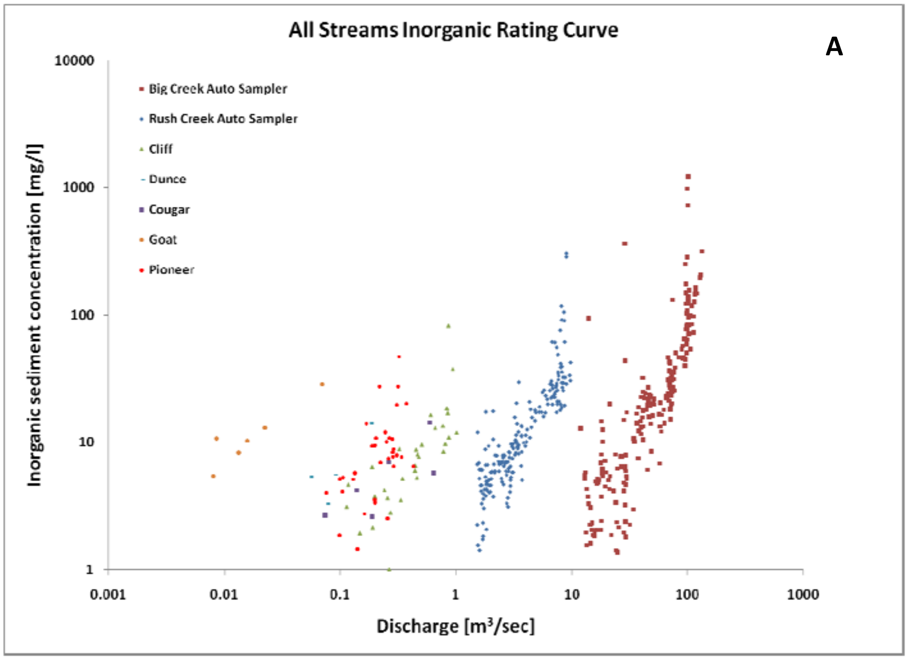


Figure 7. Sediment rating curves. (A) The inorganic sediment rating curves for all streams shows the trend of increasing inorganic sediments as discharge increases. (B) There are mild increases in organic sediment when discharge increases.



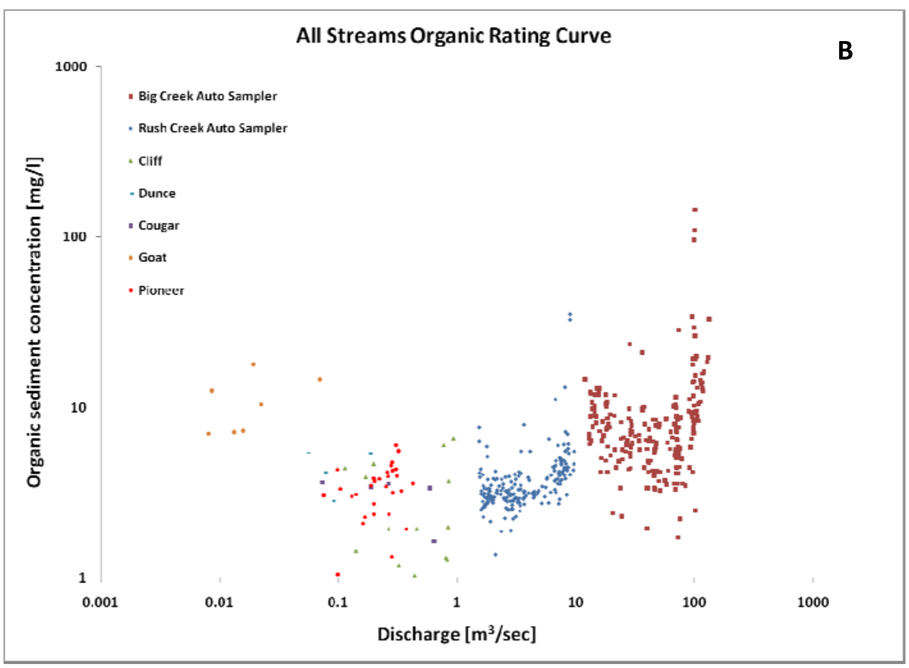
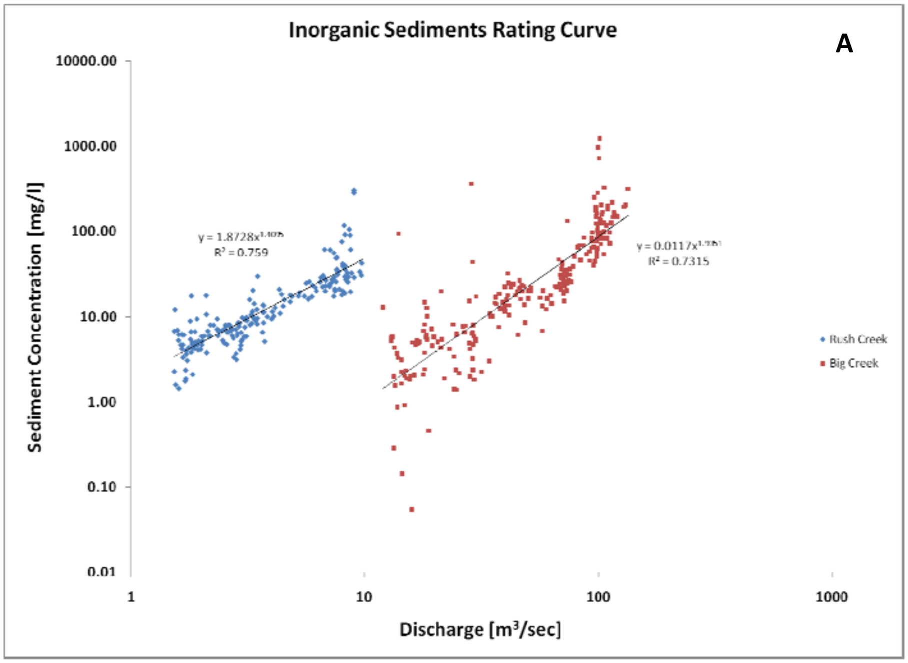



Figure 8. Sediment rating curves for Big and Rush Creeks. (A) Big Creek shows a slightly greater response in inorganic sediment when discharge increases. (B) While there is more variability in the response to discharge there is a mild positive correlation between discharge and organic sediment concentration.



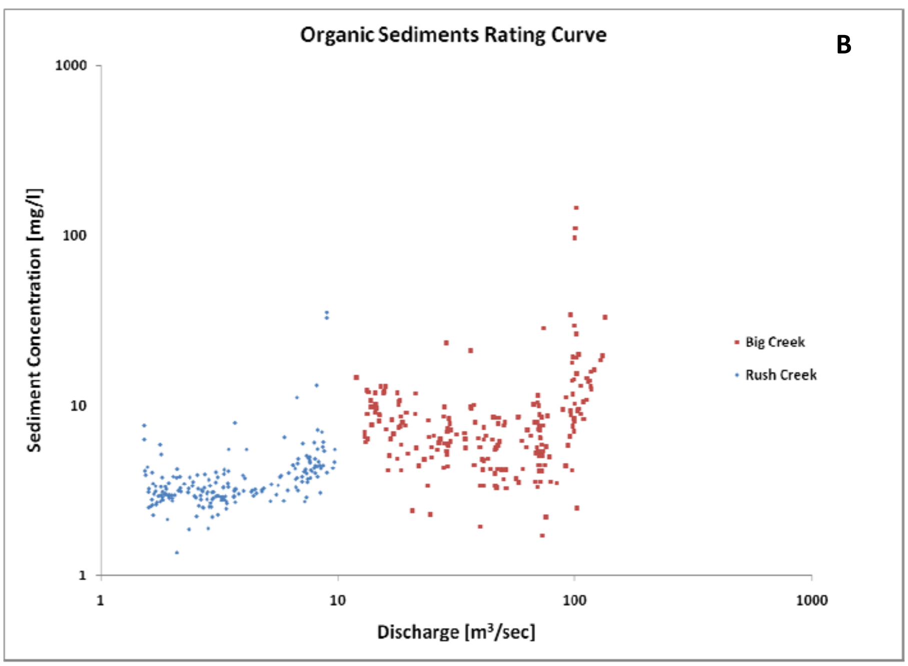
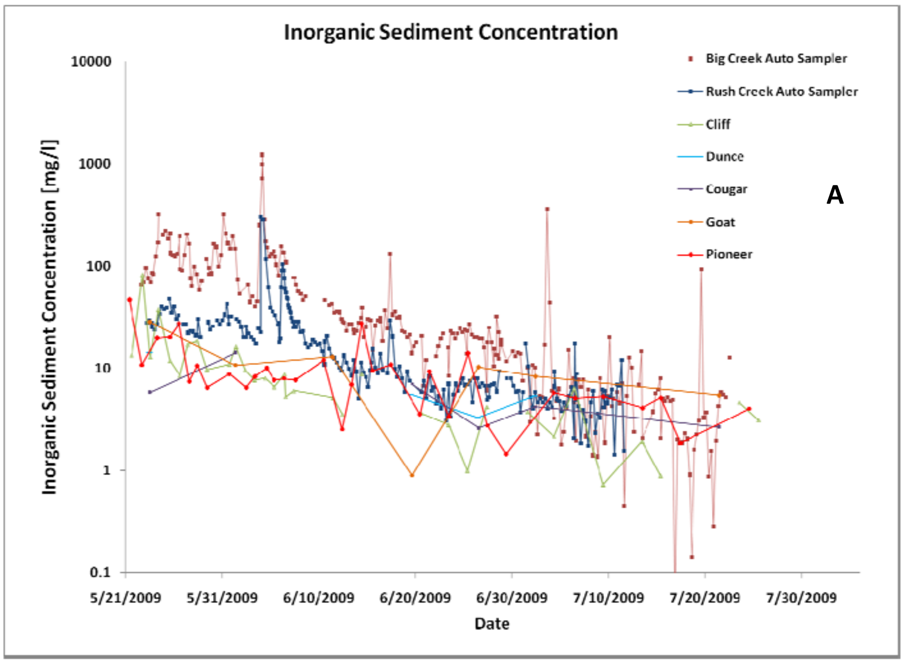



Figure 9. Sediment concentration time series. (A) Inorganic sediment concentrations for all streams showed a decline following peak runoff on May 31st. The highest concentrations for Big and Rush Creeks occurred on June 4th following a rain event. Subsequent spikes are also from rain events. (B) The organic sediment concentrations are steady through the sample period despite declines in discharge. Concentrations lower than 0.1 mg/L are likely within the margin or error.



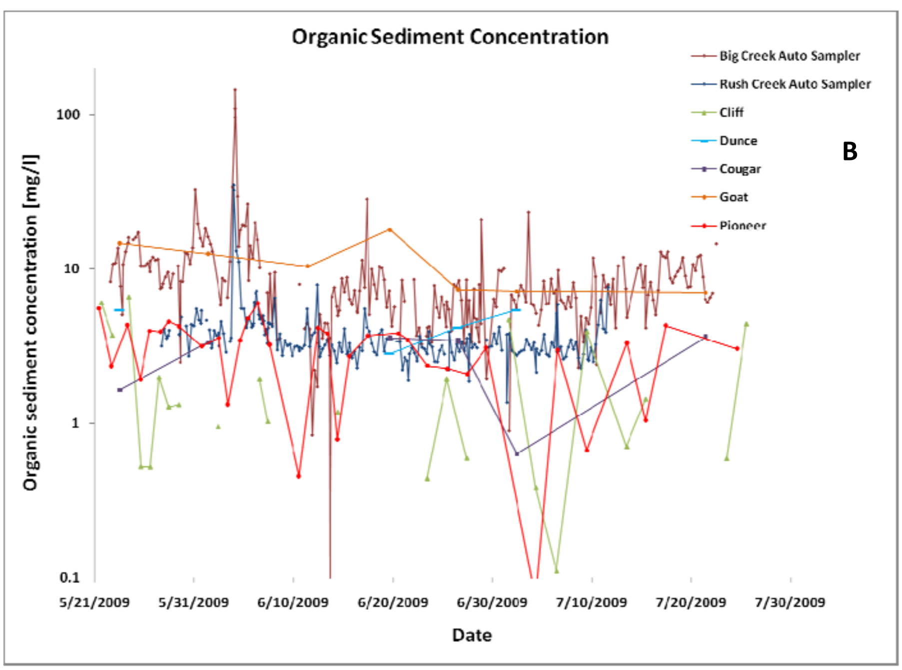
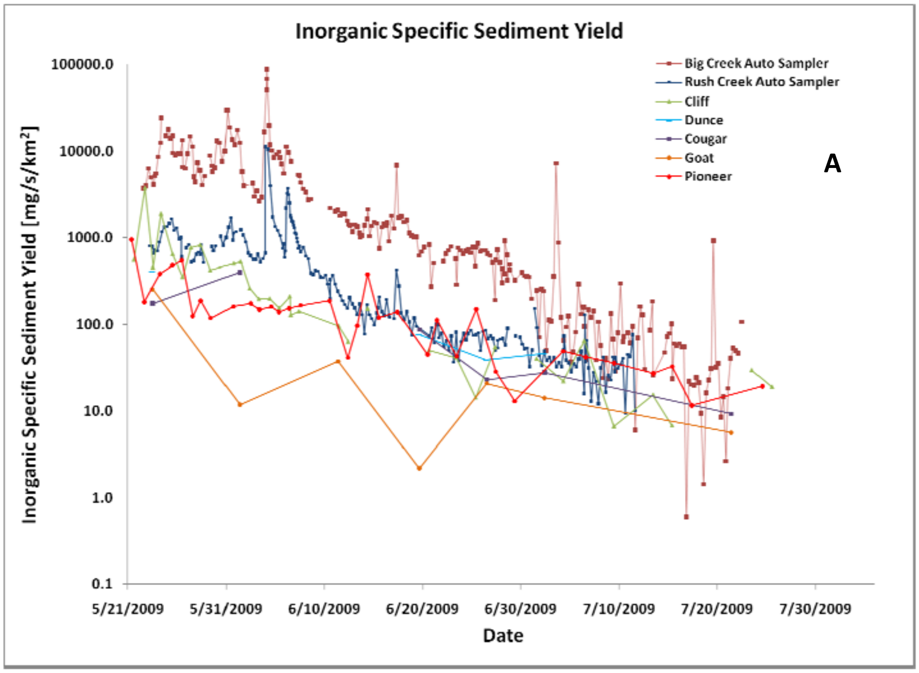



Figure 10. Photo taken 9:00 am on June 4th at the confluence of Rush and Big Creek. Near, the blackish waters of Rush Creek. Far, the milky white waters of the mainstem of Big Creek.

Figure 11.  Specific sediment yields. (A) The inorganic specific sediment yield for all streams reveals the gradual decline in sediment delivery.  The larger streams having more sediment. (B)  The organic specific sediment yield also shows the same decline pattern but in a narrower band.  Generally only dropping a power of ten.



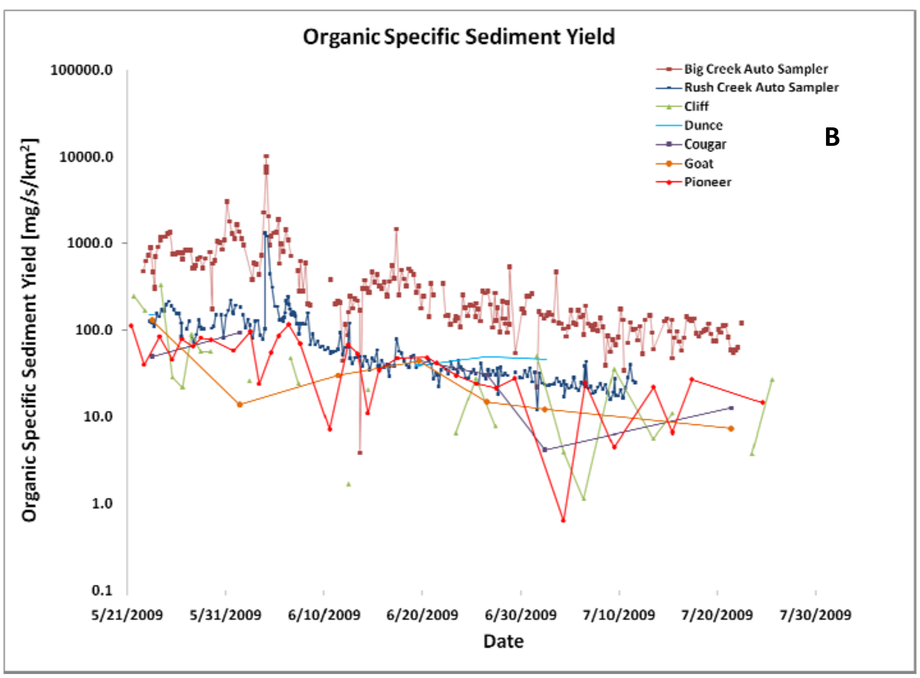
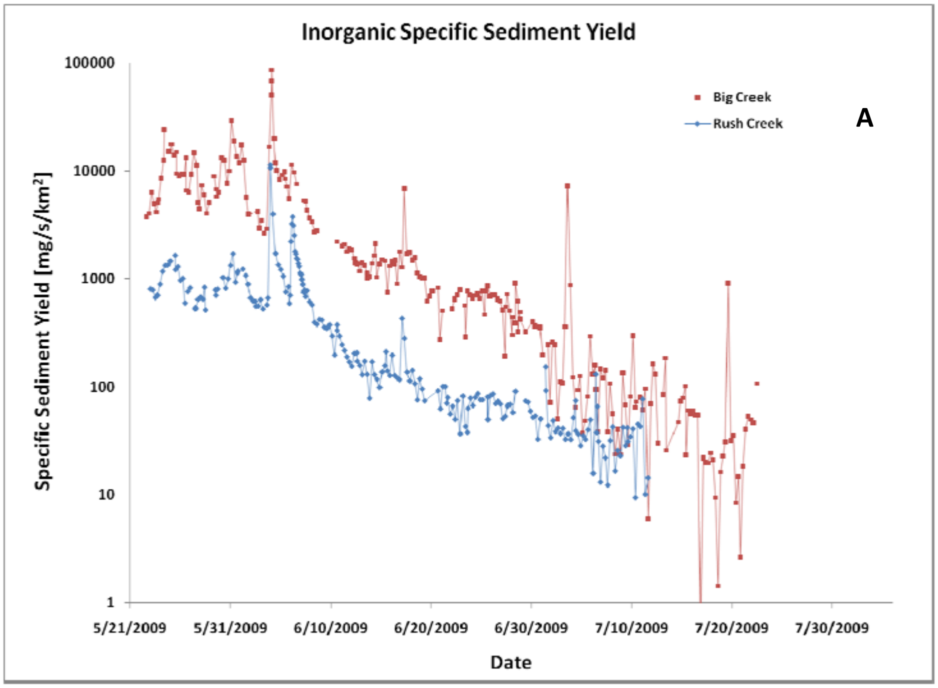



Figure 12. (A) The inorganic specific sediment yield is highest in the two larger streams, particularly when discharge is higher. As the streams approach baseflow their sediment yields converge. (B) The organic sediment yield for Big Creek began with average levels approaching 900 mg/s/km$^2$ and finished with just under 100 mg/s/km$^2$. Rush Creek also showed a decline in organic sediment yield with beginning levels averaging five and a half times the final average sediment yield.



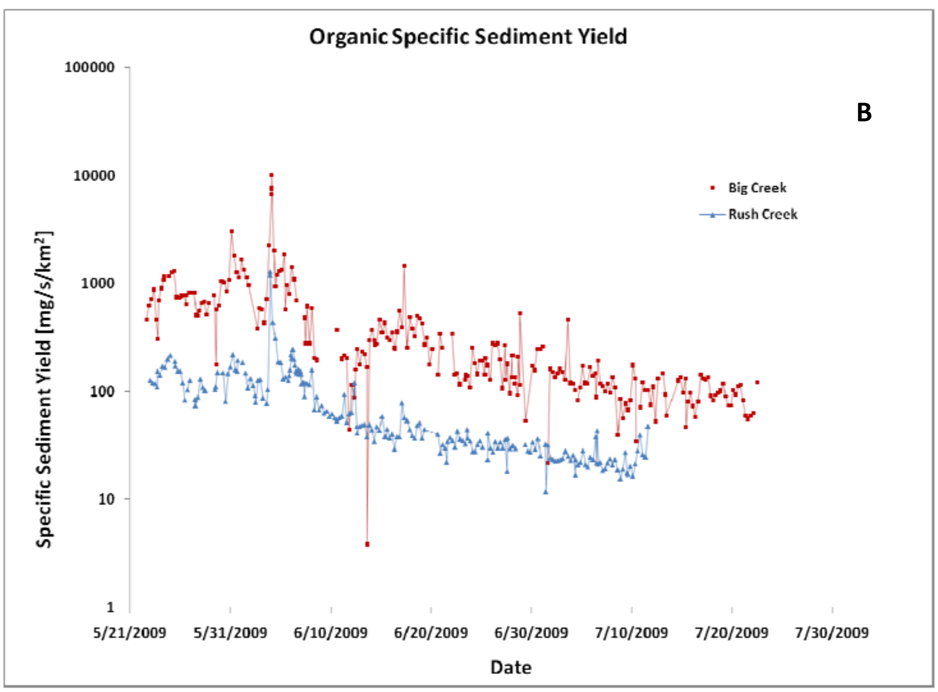
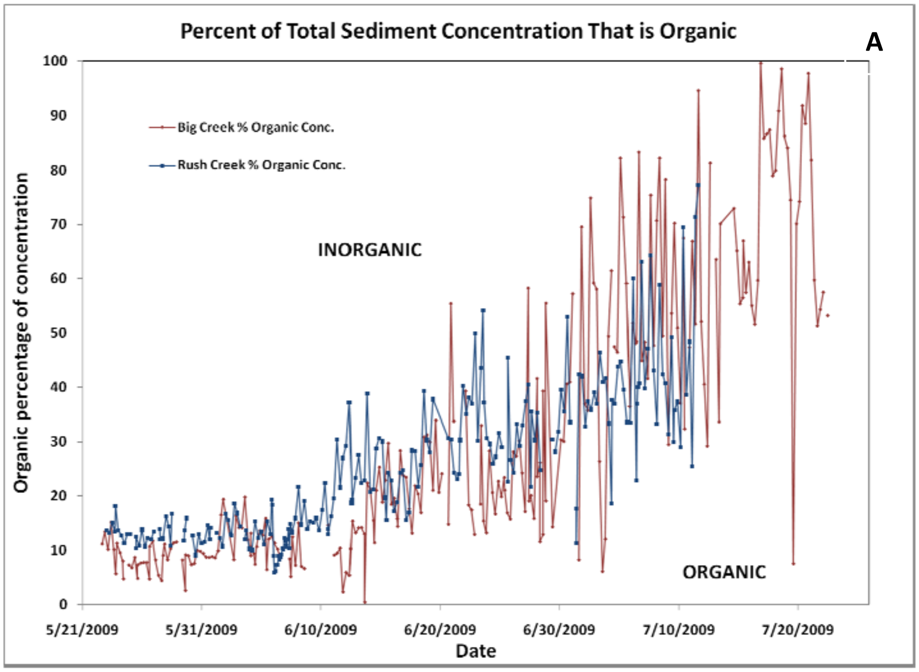



Figure 13. (A) The proportion of inorganic sediment to organic declines through the summer as discharge values drop. By the end of the sampling period organic accounts for the majority of the sediment in samples. (B) There is a strong power law function between reduction in discharge and the decline in organic sediment concentrations.



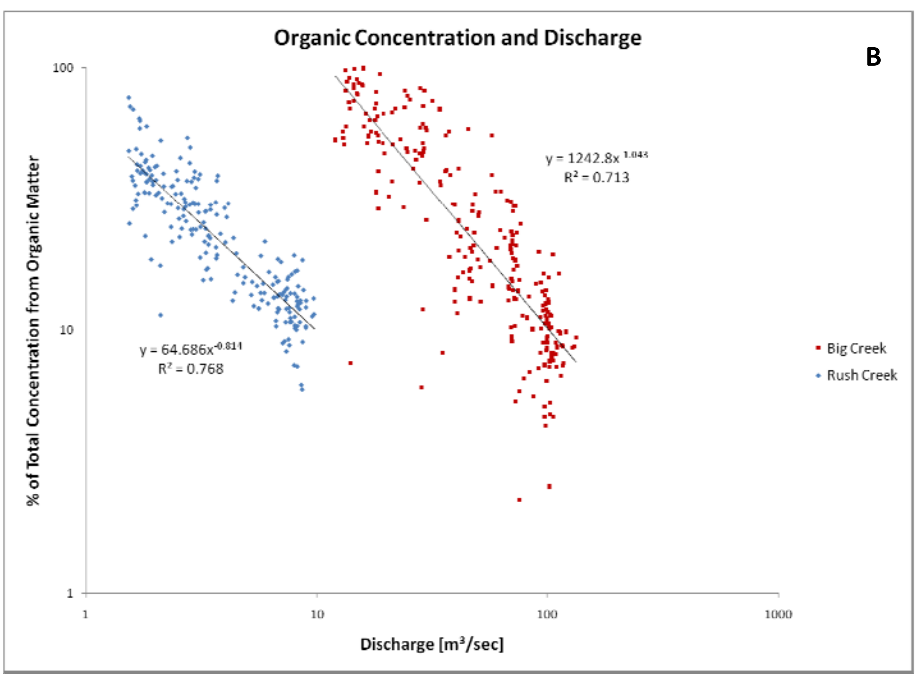
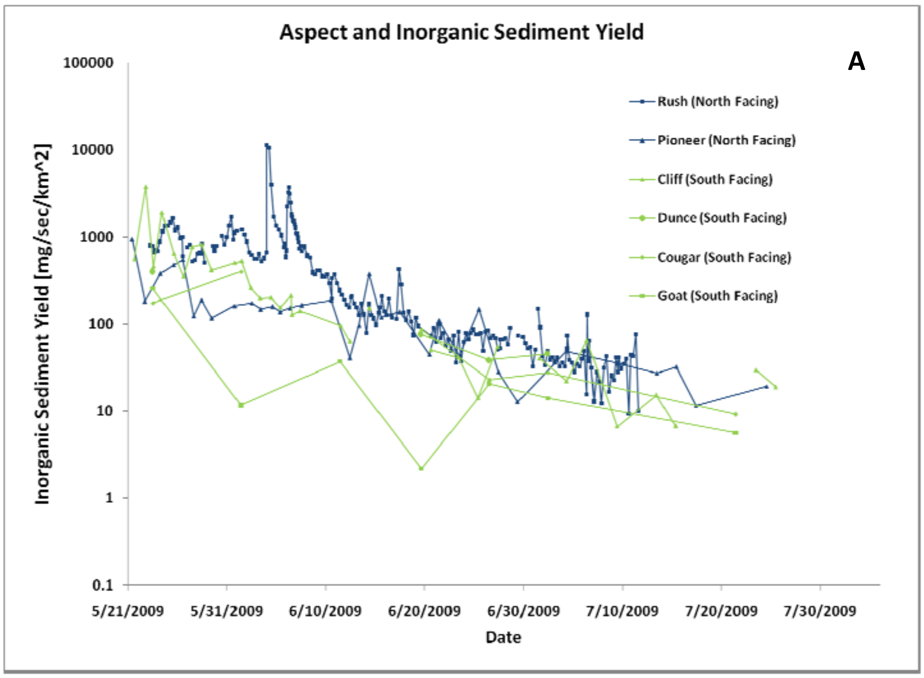



Figure 14. Aspect and Sediment Yield. (A) The inorganic sediment yield for all tributaries to Big Creek. The north facing streams are shown in blue while south facing are in green. Aspect does not appear to play a role in this study area. (B) Organic sediment yields for all tributaries to Big Creek. North facing streams are shown in blue while south facing streams are in green. Aspect does not appear to play a role in organic sediment levels for this study.



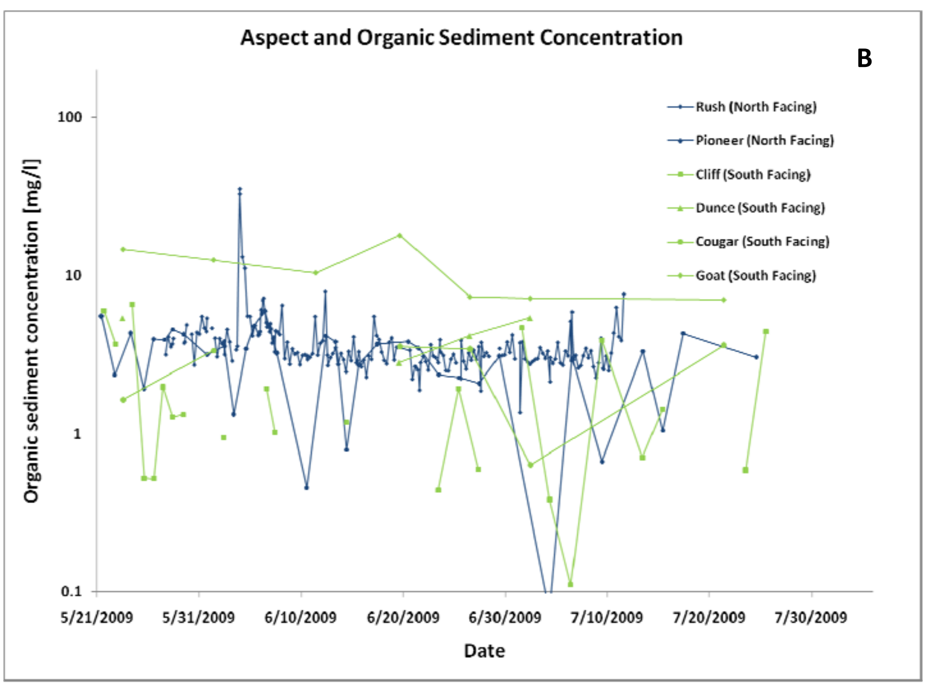



Figure 15. Sediment Concentrations and Turbidity. (A)Inorganic (B) Organic (C) combined and D E F(in Log axes). The NOAA turbidity sensor data closely correlates to inorganic sediment samples taken on Big Creek. However, organic sediment is not well represented in the turbidity measurement.

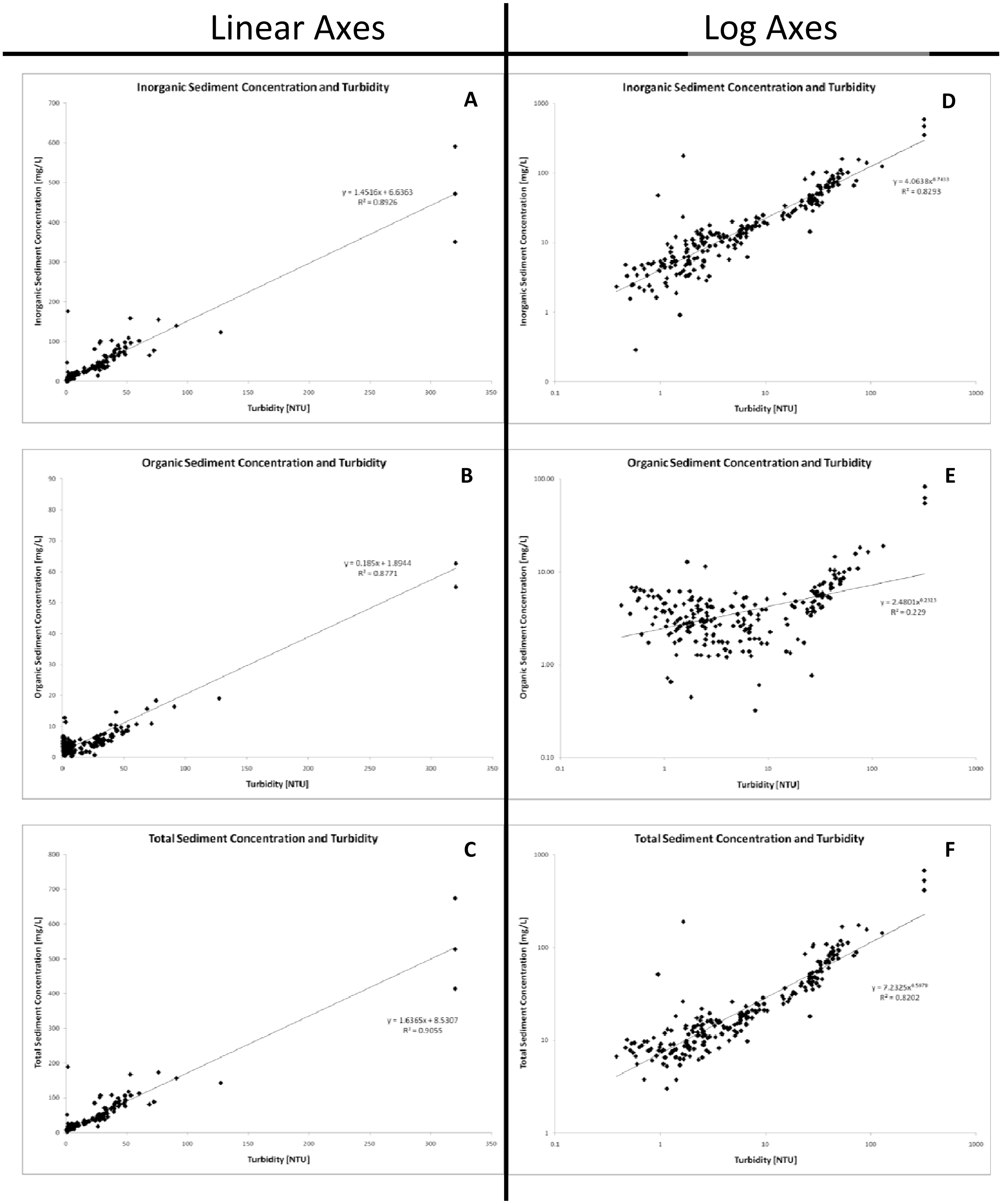
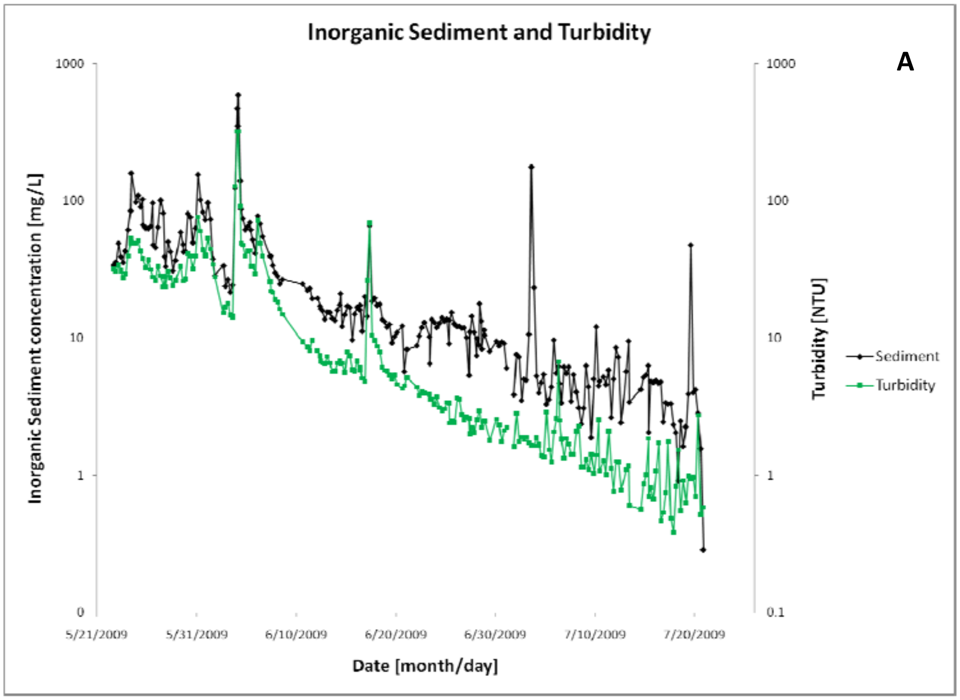


Figure 16. Sediment Concentration and Turbidity for Big Creek. (A) Inorganic sediment concentration closely follow turbidity readings from the NOAA sensor on Big Creek. (B) The turbidity sensor is not a representative measurement of organic sediment on Big Creek. The concentration on the Y-axis is an order a magnitude larger for inorganic sediments.



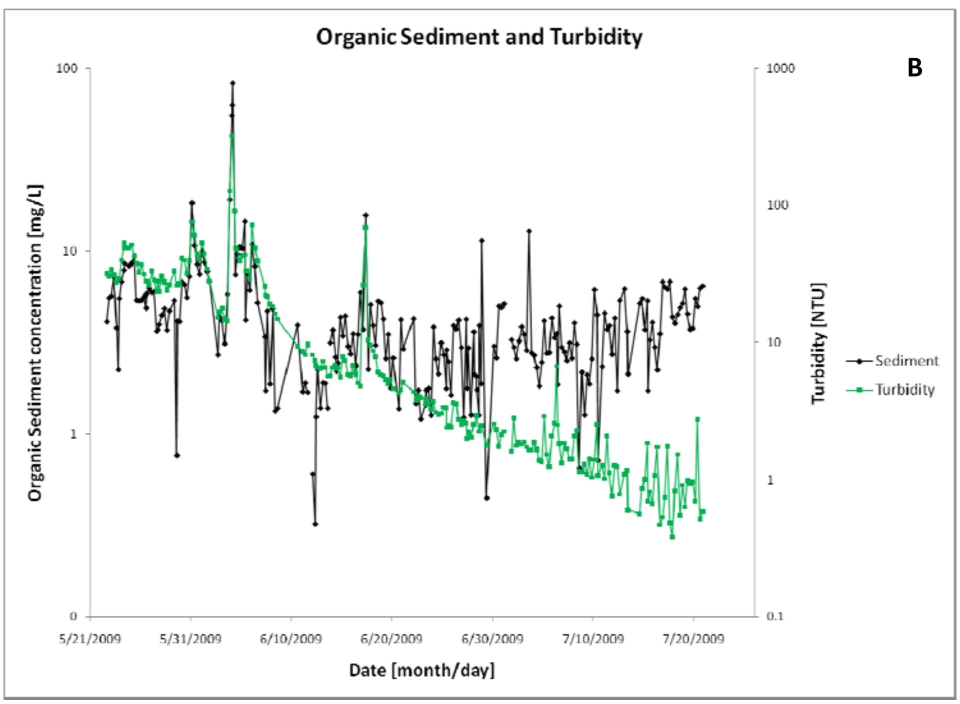
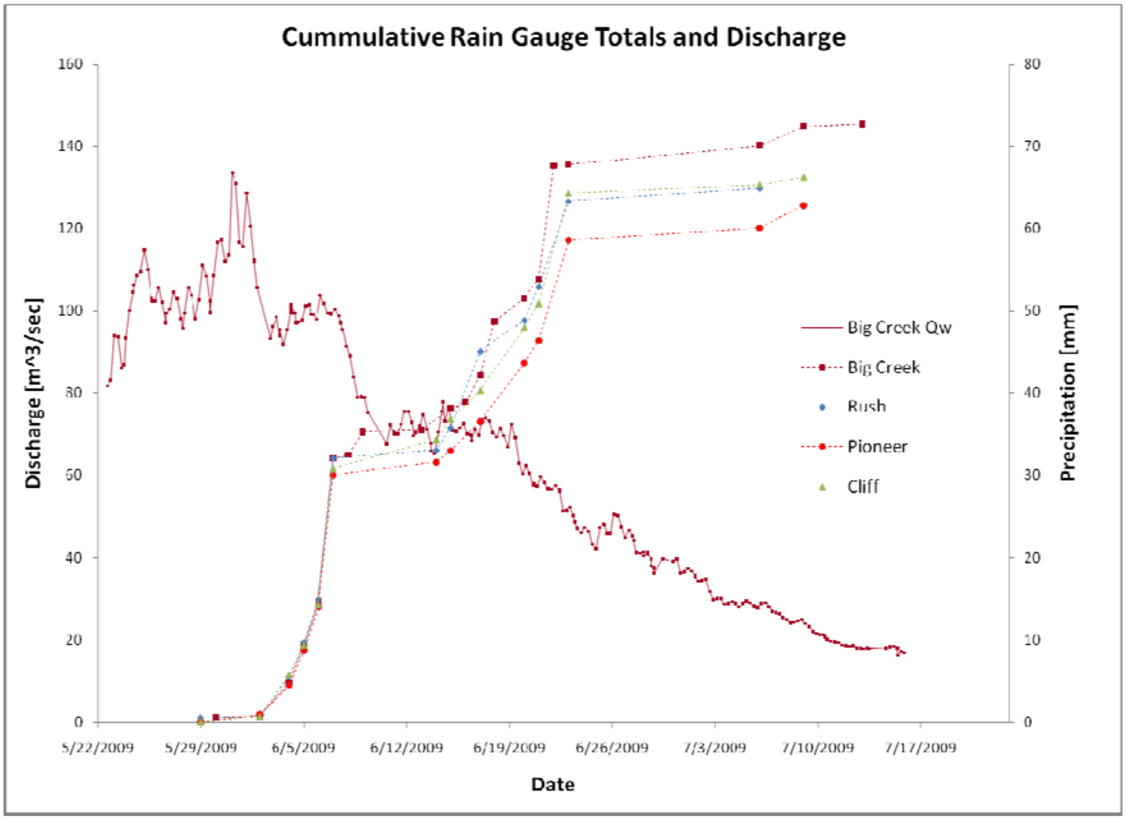



Figure 17. The accumulated precipitation totals for the four rain gauges and the discharge for Big Creek. We see in early June that the decline in discharge ceases when precipitation occurs.



# Appendix A Precipitation Data

Table 3. Precipitation data recorded each morning at 8am by the Station Manager at the Taylor Ranch.

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 21-May | 22-May | 23-May | 24-May | 25-May | 26-May | 27-May | 28-May | 29-May | 30-May | 31-May | | | | |
| Rain Total | 0 | 0 | 0 | 0.28 | 0.09 | 0 | 0 | 0 | 0 | 0.01 | 0 | | | | |
| Date | 1-Jun | 2-Jun | 3-Jun | 4-Jun | 5-Jun | 6-Jun | 7-Jun | 8-Jun | 9-Jun | 10-Jun | 11-Jun | 12-Jun | 13-Jun | 14-Jun | 15-Jun |
| Rain Total | 0 | 0.01 | 0 | 0.16 | 0.18 | 0.21 | 0.68 | 0.02 | 0.11 | 0 | 0 | 0 | 0.01 | 0 | 0.1 |
| Date | 16-Jun | 17-Jun | 18-Jun | 19-Jun | 20-Jun | 21-Jun | 22-Jun | 23-Jun | 24-Jun | 25-Jun | 26-Jun | 27-Jun | 28-Jun | 29-Jun | 30-Jun |
| Rain Total | 0.03 | 0.13 | 0.26 | 0 | 0.11 | 0.09 | 0.54 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Date | 1-Jul | 2-Jul | 3-Jul | 4-Jul | 5-Jul | 6-Jul | 7-Jul | 8-Jul | 9-Jul | 10-Jul | 11-Jul | 12-Jul | 13-Jul | 14-Jul | 15-Jul |
| Rain Total | 0 | 0 | 0 | 0 | 0 | 0.09 | 0 | 0 | 0.09 | 0 | 0 | 0 | 0.01 | 0 | 0 |
| Date | 16-Jul | 17-Jul | 18-Jul | 19-Jul | 20-Jul | 21-Jul | 22-Jul | 23-Jul | 24-Jul | 25-Jul | 26-Jul | 27-Jul | | | |
| Rain Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | | | |

Table 4. Installed rain gauges in Cliff, Pioneer and Rush Creek with their location, elevation, and gauge identification number.

| **Creek Name** | RUSH | RUSH | PIONEER | PIONEER | CLIFF | CLIFF |
|---|---|---|---|---|---|---|
| **GAUGE ID#** | RURG01 | RURG02 | PIRG01 | PIRG03 | CFRG01 | CFRG02 |
| **UTM EASTING** | 668225 | 668231 | 669092 | 668975 | 669167 | 669188 |
| **UTM NORTHING** | 4996358 | 4996404 | 4996163 | 4995930 | 4996988 | 4997073 |
| **ELEVATION** | 3960' | 3951' | 3966' | 4107' | 3950' | 3978' |

Table 5. Rain gauge readings were made the day after precipitation occurred and only when precipitation had occurred. The date is the day precipitation occurred and not the day the reading was collected. The first two columns for each creek are the accumulated precipitation while the third column is average of the two gauges for the daily amount of rain received.

| DATE | **RURG01** | **RURG02** | Rush avg. daily | **PIRG01** | **PIRG03** | Pioneer avg. daily | **CFRG01** | **CFRG02** | Cliff avg. daily |
|---|---|---|---|---|---|---|---|---|---|
| 5/29/2009 | 0.020 | 0.020 | 0.020 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6/2/2009 | 0.030 | 0.030 | 0.010 | 0.035 | 0.035 | 0.035 | 0.025 | 0.025 | 0.025 |
| 6/4/2009 | 0.220 | 0.215 | 0.188 | 0.180 | 0.170 | 0.140 | 0.220 | 0.230 | 0.200 |
| 6/5/2009 | 0.385 | 0.380 | 0.165 | 0.350 | 0.340 | 0.170 | 0.355 | 0.380 | 0.143 |
| 6/6/2009 | 0.590 | 0.585 | 0.205 | 0.555 | 0.550 | 0.208 | 0.565 | 0.565 | 0.198 |
| 6/7/2009 | 1.265 | 1.260 | 0.675 | 1.165 | 1.200 | 0.630 | 1.240 | 1.185 | 0.648 |
| 6/14/2009 | 1.305 | 1.300 | 0.040 | 1.255 | 1.230 | 0.060 | 1.330 | 1.375 | 0.140 |
| 6/15/2009 | 1.410 | 1.405 | 0.105 | 1.270 | 1.330 | 0.058 | 1.470 | 1.430 | 0.097 |
| 6/17/2009 | 1.800 | 1.750 | 0.368 | 1.415 | 1.460 | 0.138 | 1.610 | 1.565 | 0.138 |
| 6/20/2009 | 1.950 | 1.900 | 0.150 | 1.700 | 1.740 | 0.283 | 1.905 | 1.875 | 0.303 |
| 6/21/2009 | 2.090 | 2.080 | 0.160 | 1.820 | 1.830 | 0.105 | 2.005 | 2.000 | 0.113 |
| 6/23/2009 | 2.490 | 2.500 | 0.410 | 2.325 | 2.295 | 0.485 | 2.555 | 2.515 | 0.533 |
| 7/6/2009 | 2.550 | 2.565 | 0.062 | 2.360 | 2.370 | 0.055 | 2.570 | 2.575 | 0.038 |
| 7/9/2009 | | | | 2.465 | 2.480 | 0.108 | 2.600 | 2.615 | 0.035 |

# Appendix B: Tabulated Sediment Data

PDF of raw data will be inserted for the final version

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIG CREEK | 1444.1 | BC090522A | 5/22/09 13:30 | WHALE | 495 | 83.6 | 193.13 | 390.16 | 32616574.72 | 22585.33 | 6.13 | 12.38 | 1035259.17 | 716.86 |
| BIG CREEK | 1444.1 | BC090523A | 5/23/09 18:30 | WHALE | 538 | 86.8 | 152.43 | 283.33 | 24597045.45 | 17032.21 | 5.23 | 9.72 | 843945.07 | 584.39 |
| BIG CREEK | 1444.1 | BC090524A | 5/24/09 9:40 | WHALE | 501 | 138.9 | 313.43 | 625.61 | 86922778.62 | 60189.64 | 8.53 | 17.03 | 2365604.13 | 1638.06 |
| BIG CREEK | 1444.1 | BC090525A | 5/25/09 15:30 | WHALE | 510 | 101.3 | 233.73 | 458.29 | 46422123.55 | 32144.98 | 5.93 | 11.63 | 1177782.88 | 815.56 |
| BIG CREEK | 1444.1 | BC090526A | 5/26/09 14:05 | WHALE | 442 | 97.3 | 78.13 | 176.76 | 17194176.93 | 11906.10 | 3.73 | 8.44 | 820866.25 | 568.41 |
| BIG CREEK | 1444.1 | BC090527A | 5/27/09 17:50 | WHALE | 493 | 95.7 | 56.63 | 114.87 | 10988615.00 | 7609.06 | 2.53 | 5.13 | 490927.00 | 339.94 |
| BIG CREEK | 1444.1 | BC090529A | 5/29/09 15:10 | WHALE | 501 | 99.7 | 85.73 | 171.12 | 17057805.90 | 11811.67 | 3.83 | 7.64 | 762059.92 | 527.69 |
| BIG CREEK | 1444.1 | BC090601A | 6/1/09 16:30 | WHALE | 476 | 108.9 | 49.93 | 104.89 | 11426692.91 | 7912.41 | 4.03 | 8.47 | 922282.64 | 638.63 |
| BIG CREEK | 1444.1 | BC090602A | 6/2/09 14:10 | WHALE | 508 | 96.5 | 37.83 | 74.47 | 7183768.06 | 4974.40 | 2.53 | 4.98 | 480437.04 | 332.68 |
| BIG CREEK | 1444.1 | BC090603A | 6/3/09 8:45 | WHALE | 512 | 94.1 | 34.83 | 68.03 | 6398253.99 | 4430.47 | 2.93 | 5.72 | 538239.57 | 372.70 |
| BIG CREEK | 1444.1 | BC090604A | 6/4/09 11:20 | WHALE | 487 | 98.6 | 86.93 | 178.50 | 17592795.22 | 12182.12 | 7.23 | 14.85 | 1463199.23 | 1013.19 |
| BIG CREEK | 1444.1 | BC090605A | 6/5/09 11:05 | WHALE | 503 | 99.7 | 69.73 | 138.63 | 13819099.72 | 9569.03 | 4.03 | 8.01 | 798665.88 | 553.04 |
| BIG CREEK | 1444.1 | BC090607A | 6/7/09 11:20 | WHALE | 500 | 96.1 | 35.03 | 70.06 | 6730315.65 | 4660.40 | 3.43 | 6.86 | 659006.07 | 456.33 |
| BIG CREEK | 1444.1 | BC090610A | 6/10/09 20:05 | WHALE | 610 | 336.4 | 9.03 | 14.80 | 4979970.98 | 3448.38 | 1.03 | 1.69 | 568036.56 | 393.34 |
| BIG CREEK | 1444.1 | BC090612A | 6/12/09 11:20 | WHALE | 503 | 70.8 | 8.93 | 17.75 | 1256131.53 | 869.81 | 1.43 | 2.84 | 201149.84 | 139.29 |
| BIG CREEK | 1444.1 | BC090613 | 6/13/09 15:30 | WHALE | 462 | 69.6 | 8.13 | 17.60 | 1223978.41 | 847.54 | 1.63 | 3.53 | 245397.88 | 169.93 |
| BIG CREEK | 1444.1 | BC090614 | 6/14/09 10:55 | WHALE | 465 | 75.6 | 19.73 | 42.43 | 3205768.59 | 2219.83 | 3.03 | 6.52 | 492320.26 | 340.91 |
| BIG CREEK | 1444.1 | BC090616 | 6/16/09 9:35 | WHALE | 502 | 67.2 | 15.03 | 29.94 | 2011625.79 | 1392.95 | 2.43 | 4.84 | 325232.91 | 225.21 |
| BIG CREEK | 1444.1 | BC090620 | 6/20/09 16:00 | WHALE | 472 | 57.1 | 7.63 | 16.17 | 922706.54 | 638.93 | 2.13 | 4.51 | 257583.87 | 178.36 |
| BIG CREEK | 1444.1 | BC090623 | 6/23/09 10:25 | WHALE | 468 | 49.2 | 4.83 | 10.32 | 508105.63 | 351.84 | 1.33 | 2.84 | 139913.14 | 96.88 |
| BIG CREEK | 1444.1 | BC090625 | 6/25/09 9:50 | WHALE | 501 | 48.1 | 4.63 | 9.24 | 444066.54 | 307.49 | 1.73 | 3.45 | 165925.51 | 114.90 |
| BIG CREEK | 1444.1 | BC090627 | 6/27/09 10:15 | WHALE | 489 | 44.7 | 4.83 | 9.88 | 441471.25 | 305.70 | 1.13 | 2.31 | 103284.16 | 71.52 |
| BIG CREEK | 1444.1 | BC090629 | 6/29/09 10:00 | WHALE | 490 | 40.3 | 3.93 | 8.02 | 323310.45 | 223.88 | 1.93 | 3.94 | 158775.87 | 109.94 |
| BIG CREEK | 1444.1 | BC090701 | 7/1/09 15:15 | WHALE | 507 | 35.3 | 3.03 | 5.98 | 210763.51 | 145.94 | 1.63 | 3.21 | 113381.03 | 78.51 |
| BIG CREEK | 1444.1 | BC090704 | 7/4/09 9:00 | WHALE | 485 | 28.5 | 3.43 | 7.07 | 201707.96 | 139.67 | 1.53 | 3.15 | 89974.69 | 62.30 |
| BIG CREEK | 1444.1 | BC090706 | 7/6/09 10:30 | WHALE | 497 | 28.6 | 5.53 | 11.13 | 318161.04 | 220.31 | 1.73 | 3.48 | 99533.20 | 68.92 |
| BIG CREEK | 1444.1 | BC090710 | 7/10/09 11:15 | WHALE | 453 | 20.3 | 1.83 | 4.04 | 82154.85 | 56.89 | 1.63 | 3.60 | 73176.18 | 50.67 |
| BIG CREEK | 1444.1 | BC090713 | 7/13/09 11:25 | WHALE | 486 | 17.9 | 1.93 | 3.97 | 71263.88 | 49.35 | 1.63 | 3.35 | 60186.60 | 41.68 |
| BIG CREEK | 1444.1 | BC090715 | 7/15/09 9:30 | WHALE | 463 | 16.4 | 1.93 | 4.17 | 68389.47 | 47.36 | 1.43 | 3.09 | 50671.99 | 35.09 |
| BIG CREEK | 1444.1 | BC090717 | 7/17/09 10:40 | WHALE | 410 | 14.9 | 1.73 | 4.22 | 62917.83 | 43.57 | 1.33 | 3.24 | 48370.36 | 33.49 |
| BIG CREEK | 1444.1 | BC090723 | 7/23/09 12:35 | WHALE | 475 | 11.8 | 1.33 | 2.80 | 33166.56 | 22.97 | 2.03 | 4.27 | 50622.64 | 35.05 |
| BIG CREEK | 1444.1 | BC090727 | 7/27/09 11:45 | WHALE | 463 | 10.2 | 2.83 | 6.11 | 62337.47 | 43.17 | 1.83 | 3.95 | 40310.09 | 27.91 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052201 | 5/22/09 15:00 | ISCO/SEQ. TIME | 397 | 81.7 | 13.53 | 65.93 | 5387583.09 | 3730.63 | 1.63 | 8.28 | 676379.00 | 468.36 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052202 | 5/22/09 21:00 | ISCO/SEQ. TIME | 384 | 83.1 | 13.73 | 69.41 | 5765668.37 | 3992.43 | 2.13 | 10.77 | 894665.26 | 619.51 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052301 | 5/23/09 3:00 | ISCO/SEQ. TIME | 412 | 93.9 | 20.23 | 97.20 | 9122624.92 | 6316.96 | 2.33 | 10.96 | 1028504.00 | 712.19 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052302 | 5/23/09 9:00 | ISCO/SEQ. TIME | 420 | 93.6 | 16.43 | 76.42 | 7152189.81 | 4952.53 | 3.03 | 13.66 | 1278209.68 | 885.10 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052303 | 5/23/09 15:00 | ISCO/SEQ. TIME | 403 | 86.2 | 14.33 | 69.00 | 5948894.99 | 4119.31 | 1.53 | 7.74 | 667401.90 | 462.14 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090523 | 5/23/09 18:40 | ISCO/MANUAL | 325 | 86.8 | 14.03 | 84.85 | 7366186.64 | 5100.71 | 0.73 | 5.06 | 439114.01 | 304.06 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052304 | 5/23/09 21:00 | ISCO/SEQ. TIME | 441 | 93.4 | 18.93 | 84.34 | 7879866.59 | 5456.41 | 2.43 | 10.71 | 1000382.52 | 692.71 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052401 | 5/24/09 3:00 | ISCO/SEQ. TIME | 416 | 100.1 | 25.63 | 123.24 | 12331067.94 | 8538.64 | 2.83 | 12.94 | 1295182.36 | 896.85 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052402 | 5/24/09 9:00 | ISCO/SEQ. TIME | 474 | 104.4 | 40.13 | 171.24 | 17871681.17 | 12375.24 | 3.73 | 14.79 | 1543636.85 | 1068.89 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090524A | 5/24/09 10:00 | ISCO/MANUAL | 365 | 106.1 | 58.03 | 325.98 | 34592842.28 | 23953.80 | 3.13 | 16.01 | 1699247.80 | 1176.64 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052404 | 5/24/09 21:00 | ISCO/SEQ. TIME | 402 | 109.7 | 39.43 | 199.18 | 21847901.29 | 15128.57 | 3.33 | 15.51 | 1700993.83 | 1177.85 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052501 | 5/25/09 3:00 | ISCO/SEQ. TIME | 411 | 114.6 | 44.93 | 222.57 | 25516938.44 | 17669.19 | 3.53 | 16.04 | 1838444.91 | 1273.03 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052502 | 5/25/09 9:00 | ISCO/SEQ. TIME | 390 | 110.0 | 35.23 | 183.04 | 20137055.05 | 13943.90 | 3.63 | 17.28 | 1901016.69 | 1316.36 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090525A | 5/25/09 14:45 | ISCO/MANUAL | 451 | 102.9 | 46.43 | 209.31 | 21538491.98 | 14914.32 | 2.43 | 10.50 | 1080059.03 | 747.89 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052503 | 5/25/09 15:00 | ISCO/SEQ. TIME | 433 | 102.3 | 28.83 | 133.59 | 13662449.78 | 9460.56 | 2.33 | 10.48 | 1072171.68 | 742.42 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052504 | 5/25/09 21:00 | ISCO/SEQ. TIME | 379 | 102.3 | 24.03 | 126.98 | 12992756.69 | 8996.83 | 2.03 | 10.44 | 1068349.47 | 739.78 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052601 | 5/26/09 3:00 | ISCO/SEQ. TIME | 395 | 105.6 | 24.83 | 125.85 | 13294726.31 | 9205.93 | 2.13 | 10.50 | 1109618.42 | 768.35 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052602 | 5/26/09 9:00 | ISCO/SEQ. TIME | 396 | 102.0 | 25.83 | 130.77 | 13344152.89 | 9240.15 | 2.23 | 10.92 | 1113975.64 | 771.37 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090526A | 5/26/09 14:35 | ISCO/MANUAL | 334 | 97.3 | 32.33 | 196.50 | 19113958.77 | 13235.45 | 1.63 | 9.62 | 935472.03 | 647.77 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052603 | 5/26/09 15:00 | ISCO/SEQ. TIME | 381 | 99.5 | 18.23 | 94.59 | 9407423.72 | 6514.17 | 2.23 | 11.30 | 1123919.06 | 778.26 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052604 | 5/26/09 21:00 | ISCO/SEQ. TIME | 390 | 100.4 | 17.83 | 90.16 | 9052396.87 | 6268.33 | 2.43 | 11.95 | 1200345.18 | 831.18 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052701 | 5/27/09 3:00 | ISCO/SEQ. TIME | 393 | 104.4 | 25.23 | 128.63 | 13427051.05 | 9297.56 | 2.33 | 11.43 | 1193298.50 | 826.30 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052702 | 5/27/09 9:00 | ISCO/SEQ. TIME | 404 | 102.9 | 40.93 | 205.90 | 21190512.25 | 14673.36 | 2.43 | 11.58 | 1191853.53 | 825.30 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052703 | 5/27/09 15:00 | ISCO/SEQ. TIME | 392 | 98.1 | 31.93 | 164.56 | 16139203.17 | 11175.58 | 1.43 | 7.48 | 734028.26 | 508.28 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090527A | 5/27/09 18:10 | ISCO/MANUAL | 439 | 95.7 | 17.23 | 76.69 | 7335986.30 | 5079.80 | 1.63 | 7.60 | 726734.68 | 503.23 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052704 | 5/27/09 21:00 | ISCO/SEQ. TIME | 386 | 99.5 | 12.83 | 64.17 | 6384168.18 | 4420.71 | 1.53 | 8.03 | 798934.67 | 553.22 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052801 | 5/28/09 3:00 | ISCO/SEQ. TIME | 410 | 105.7 | 20.63 | 99.73 | 10542074.03 | 7299.85 | 1.83 | 8.90 | 940317.99 | 651.12 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052802 | 5/28/09 9:00 | ISCO/SEQ. TIME | 419 | 103.6 | 17.83 | 83.57 | 8660787.84 | 5997.16 | 2.03 | 9.56 | 990354.05 | 685.77 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052803 | 5/28/09 15:00 | ISCO/SEQ. TIME | 387 | 98.1 | 11.93 | 59.15 | 5801429.81 | 4017.20 | 1.43 | 7.57 | 742028.78 | 513.82 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052804 | 5/28/09 21:00 | ISCO/SEQ. TIME | 389 | 102.8 | 14.33 | 71.67 | 7364269.86 | 5099.39 | 1.83 | 9.31 | 956935.97 | 662.63 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052902 | 5/29/09 9:00 | ISCO/SEQ. TIME | 415 | 108.4 | 24.53 | 118.03 | 12798477.55 | 8862.30 | 2.23 | 10.47 | 1135351.73 | 786.17 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052903 | 5/29/09 15:00 | ISCO/SEQ. TIME | 432 | 102.3 | 20.83 | 95.36 | 9752460.84 | 6753.09 | 0.33 | 2.49 | 254911.98 | 176.51 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090529A | 5/29/09 15:20 | ISCO/MANUAL | 418 | 99.7 | 17.73 | 83.28 | 8301889.98 | 5748.64 | 1.73 | 8.33 | 830747.42 | 575.25 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09052904 | 5/29/09 21:00 | ISCO/SEQ. TIME | 396 | 108.7 | 17.03 | 84.51 | 9185914.39 | 6360.78 | 1.63 | 8.29 | 901624.64 | 624.33 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053001 | 5/30/09 3:00 | ISCO/SEQ. TIME | 389 | 116.8 | 31.43 | 163.19 | 19059666.54 | 13197.86 | 2.63 | 12.87 | 1503400.39 | 1041.03 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053002 | 5/30/09 9:00 | ISCO/SEQ. TIME | 386 | 117.4 | 29.43 | 153.71 | 18040867.51 | 12492.39 | 2.53 | 12.51 | 1468852.38 | 1017.11 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053003 | 5/30/09 15:00 | ISCO/SEQ. TIME | 382 | 112.0 | 18.93 | 98.14 | 10987352.61 | 7608.19 | 2.13 | 10.82 | 1211443.02 | 838.86 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053004 | 5/30/09 21:00 | ISCO/SEQ. TIME | 390 | 113.6 | 24.73 | 126.99 | 14429570.15 | 9991.75 | 2.83 | 13.73 | 1560070.83 | 1080.27 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053101 | 5/31/09 3:00 | ISCO/SEQ. TIME | 504 | 133.6 | 78.23 | 318.14 | 42496200.74 | 29426.48 | 9.23 | 32.87 | 4390393.87 | 3040.13 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053102 | 5/31/09 9:00 | ISCO/SEQ. TIME | 507 | 130.9 | 51.73 | 207.40 | 27139024.96 | 18792.41 | 5.43 | 19.71 | 2578771.74 | 1785.67 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053103 | 5/31/09 15:00 | ISCO/SEQ. TIME | 476 | 116.8 | 39.43 | 167.44 | 19563871.82 | 13546.99 | 4.03 | 15.82 | 1848943.06 | 1280.30 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09053104 | 5/31/09 21:00 | ISCO/SEQ. TIME | 473 | 115.6 | 34.43 | 146.52 | 16933522.38 | 11725.61 | 3.53 | 14.09 | 1628083.88 | 1127.37 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060101 | 6/1/09 3:00 | ISCO/SEQ. TIME | 504 | 128.6 | 48.93 | 197.10 | 25337988.68 | 17545.28 | 5.03 | 18.44 | 2371076.33 | 1641.85 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060102 | 6/1/09 9:00 | ISCO/SEQ. TIME | 511 | 120.7 | 37.53 | 147.88 | 17847927.47 | 12358.79 | 4.43 | 16.18 | 1952191.05 | 1351.79 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060103 | 6/1/09 15:00 | ISCO/SEQ. TIME | 496 | 112.1 | 18.73 | 73.59 | 8252520.44 | 5714.45 | 3.83 | 14.54 | 1629974.68 | 1128.68 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060104 | 6/1/09 19:30 | ISCO/SEQ. TIME | 296 | 105.7 | 8.43 | 54.27 | 5735363.98 | 3971.45 | 2.03 | 13.04 | 1378246.69 | 954.37 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090602A | 6/2/09 16:45 | ISCO/MANUAL | 455 | 93.2 | 15.33 | 65.12 | 6072267.02 | 4204.74 | 1.23 | 5.85 | 545442.88 | 377.69 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060204 | 6/2/09 21:00 | ISCO/SEQ. TIME | 442 | 96.3 | 10.53 | 44.57 | 4290723.90 | 2971.11 | 1.93 | 8.73 | 840207.32 | 581.80 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060301 | 6/3/09 3:00 | ISCO/SEQ. TIME | 416 | 98.5 | 11.13 | 50.67 | 4990318.31 | 3455.54 | 1.73 | 8.37 | 824084.04 | 570.64 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060302 | 6/3/09 9:00 | ISCO/SEQ. TIME | 427 | 95.2 | 9.23 | 39.98 | 3806998.06 | 2636.15 | 1.33 | 6.56 | 624869.03 | 432.69 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060303 | 6/3/09 15:00 | ISCO/SEQ. TIME | 384 | 91.8 | 9.33 | 45.56 | 4181349.30 | 2895.37 | 2.23 | 11.22 | 1029955.62 | 713.19 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060304 | 6/3/09 21:00 | ISCO/SEQ. TIME | 385 | 95.6 | 47.73 | 253.08 | 24184642.24 | 16746.64 | 7.33 | 34.12 | 3260777.78 | 2257.92 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060401A | 6/4/09 3:00 | ISCO/SEQ. TIME | 115 | 99.8 | 54.33 | 978.58 | 97623449.54 | 67599.32 | 6.33 | 96.44 | 9620848.97 | 6661.95 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060401B | 6/4/09 3:00 | ISCO/SEQ. TIME | 125 | 100.6 | 43.93 | 726.67 | 73087146.82 | 50609.16 | 7.83 | 109.59 | 11022148.21 | 7632.28 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060401C | 6/4/09 3:00 | ISCO/SEQ. TIME | 151 | 101.3 | 89.33 | 1226.66 | 124277109.94 | 86055.63 | 12.53 | 144.79 | 14669412.95 | 10157.83 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060402 | 6/4/09 9:00 | ISCO/SEQ. TIME | 417 | 99.5 | 58.33 | 286.20 | 28473352.99 | 19716.36 | 6.83 | 29.52 | 2936761.21 | 2033.56 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090604A | 6/4/09 11:35 | ISCO/MANUAL | 449 | 97.3 | 39.03 | 175.95 | 17115112.09 | 11851.35 | 3.33 | 14.01 | 1362467.57 | 943.44 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060403 | 6/4/09 15:00 | ISCO/SEQ. TIME | 408 | 97.4 | 30.33 | 149.74 | 14577788.60 | 10094.38 | 3.93 | 17.84 | 1736961.56 | 1202.76 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060404 | 6/4/09 21:00 | ISCO/SEQ. TIME | 383 | 97.8 | 23.63 | 123.42 | 12068786.34 | 8357.03 | 4.03 | 19.38 | 1895248.64 | 1312.36 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060501 | 6/5/09 3:00 | ISCO/SEQ. TIME | 389 | 101.3 | 25.33 | 130.54 | 13220671.11 | 9154.65 | 4.03 | 19.10 | 1934493.30 | 1339.54 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060502 | 6/5/09 9:00 | ISCO/SEQ. TIME | 407 | 101.3 | 28.33 | 139.89 | 14175791.33 | 9816.02 | 5.93 | 26.39 | 2674008.98 | 1851.62 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090605A | 6/5/09 11:20 | ISCO/MANUAL | 460 | 99.1 | 28.33 | 123.19 | 12211274.37 | 8455.69 | 1.93 | 8.43 | 835816.22 | 578.76 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060503 | 6/5/09 15:00 | ISCO/SEQ. TIME | 404 | 99.0 | 21.03 | 103.35 | 10236048.75 | 7087.95 | 3.03 | 14.15 | 1401614.29 | 970.55 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060504 | 6/5/09 21:00 | ISCO/SEQ. TIME | 382 | 98.0 | 15.83 | 81.25 | 7961394.74 | 5512.86 | 2.33 | 11.73 | 1149143.70 | 795.72 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060601 | 6/6/09 3:00 | ISCO/SEQ. TIME | 407 | 103.6 | 31.63 | 156.77 | 16248249.80 | 11251.09 | 4.43 | 20.01 | 2073797.95 | 1436.00 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060602 | 6/6/09 9:00 | ISCO/SEQ. TIME | 415 | 101.9 | 28.23 | 136.60 | 13914804.15 | 9635.30 | 3.43 | 15.48 | 1576457.50 | 1091.62 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060603 | 6/6/09 15:00 | ISCO/SEQ. TIME | 408 | 99.5 | 22.43 | 109.43 | 10889108.50 | 7540.16 | 2.13 | 10.21 | 1015594.32 | 703.25 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060702 | 6/7/09 9:00 | ISCO/SEQ. TIME | 421 | 98.9 | 16.63 | 77.21 | 7640018.89 | 5290.33 | 1.43 | 7.05 | 697521.33 | 483.00 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090607A | 6/7/09 11:30 | ISCO/MANUAL | 423 | 97.3 | 16.73 | 77.32 | 7520620.19 | 5207.65 | 0.73 | 4.16 | 404392.83 | 280.02 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060703 | 6/7/09 15:00 | ISCO/SEQ. TIME | 411 | 95.5 | 13.93 | 65.54 | 6260679.16 | 4335.20 | 1.93 | 9.30 | 888241.46 | 615.06 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060704 | 6/7/09 21:00 | ISCO/SEQ. TIME | 389 | 91.4 | 11.63 | 57.22 | 5226975.09 | 3619.42 | 0.73 | 4.42 | 403640.59 | 279.50 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060801 | 6/8/09 3:00 | ISCO/SEQ. TIME | 400 | 89.1 | 11.33 | 53.94 | 4804151.02 | 3326.63 | 1.93 | 9.52 | 847974.82 | 587.18 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060802 | 6/8/09 9:00 | ISCO/SEQ. TIME | 397 | 83.8 | 9.83 | 46.52 | 3900827.04 | 2701.13 | 0.53 | 3.48 | 291877.68 | 202.11 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09060803 | 6/8/09 15:00 | ISCO/SEQ. TIME | 383 | 78.9 | 10.23 | 50.58 | 3992982.69 | 2764.94 | 0.53 | 3.57 | 281466.29 | 194.90 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061003 | 6/10/09 15:00 | ISCO/SEQ. TIME | 364 | 67.7 | 9.03 | 46.62 | 3156529.08 | 2185.74 | 1.43 | 7.97 | 539621.80 | 373.66 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061101 | 6/11/09 3:00 | ISCO/SEQ. TIME | 370 | 70.3 | 8.23 | 41.28 | 2900651.20 | 2008.55 | 0.63 | 4.12 | 289313.60 | 200.34 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061102 | 6/11/09 9:00 | ISCO/SEQ. TIME | 384 | 70.2 | 8.83 | 42.85 | 3008544.83 | 2083.27 | 0.73 | 4.46 | 313221.01 | 216.89 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061103 | 6/11/09 15:00 | ISCO/SEQ. TIME | 373 | 72.5 | 7.23 | 35.33 | 2560181.22 | 1772.80 | 0.63 | 4.09 | 296676.09 | 205.43 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061104 | 6/11/09 21:00 | ISCO/SEQ. TIME | 369 | 75.6 | 7.33 | 36.33 | 2744788.74 | 1900.63 | -0.07 | 0.84 | 63621.38 | 44.05 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061201 | 6/12/09 3:00 | ISCO/SEQ. TIME | 381 | 75.4 | 7.43 | 35.57 | 2683696.44 | 1858.32 | 0.23 | 2.22 | 167123.74 | 115.72 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061202 | 6/12/09 9:00 | ISCO/SEQ. TIME | 405 | 72.8 | 6.93 | 30.60 | 2228465.36 | 1543.10 | 0.13 | 1.73 | 125710.06 | 87.05 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090612A | 6/12/09 11:30 | ISCO/MANUAL | 509 | 69.6 | 8.33 | 29.04 | 2020120.47 | 1398.83 | 0.63 | 3.31 | 230409.52 | 159.55 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061203 | 6/12/09 15:00 | ISCO/SEQ. TIME | 368 | 70.4 | 5.83 | 27.95 | 1966905.27 | 1361.98 | 0.83 | 5.07 | 357015.67 | 247.22 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061204 | 6/12/09 21:00 | ISCO/SEQ. TIME | 382 | 71.8 | 5.23 | 23.48 | 1685971.53 | 1167.45 | 0.53 | 3.57 | 256515.79 | 177.62 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061301 | 6/13/09 3:00 | ISCO/SEQ. TIME | 383 | 74.7 | 5.93 | 27.21 | 2033683.99 | 1408.22 | 0.73 | 4.47 | 334080.09 | 231.33 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061302 | 6/13/09 9:00 | ISCO/SEQ. TIME | 386 | 71.0 | 5.93 | 26.96 | 1914762.42 | 1325.88 | 0.73 | 4.44 | 315646.68 | 218.57 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061303 | 6/13/09 15:00 | ISCO/SEQ. TIME | 383 | 67.9 | 5.33 | 23.94 | 1626079.87 | 1125.98 | 0.53 | 3.57 | 242130.03 | 167.66 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090613 | 6/13/09 15:40 | ISCO/MANUAL | 430 | 66.0 | 5.63 | 22.23 | 1467688.92 | 1016.30 | -0.27 | 0.08 | 5520.60 | 3.82 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061304 | 6/13/09 21:00 | ISCO/SEQ. TIME | 359 | 65.3 | 4.83 | 22.98 | 1499602.02 | 1038.40 | 1.13 | 6.62 | 431849.22 | 299.03 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061401 | 6/14/09 3:00 | ISCO/SEQ. TIME | 359 | 70.5 | 5.73 | 28.20 | 1989212.57 | 1377.43 | 1.33 | 7.58 | 534836.96 | 370.35 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061402 | 6/14/09 9:00 | ISCO/SEQ. TIME | 391 | 75.6 | 6.83 | 31.34 | 2367815.62 | 1639.59 | 1.03 | 5.73 | 432909.61 | 299.77 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090614 | 6/14/09 11:10 | ISCO/MANUAL | 466 | 78.0 | 9.83 | 38.89 | 3032102.21 | 2099.58 | 1.03 | 5.00 | 389522.94 | 269.72 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061403 | 6/14/09 15:00 | ISCO/SEQ. TIME | 381 | 73.3 | 4.63 | 20.27 | 1485033.40 | 1028.31 | 0.93 | 5.40 | 395229.62 | 273.68 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061404 | 6/14/09 21:00 | ISCO/SEQ. TIME | 375 | 76.5 | 5.53 | 25.67 | 1964515.70 | 1360.33 | 1.63 | 8.69 | 665229.18 | 460.64 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061501 | 6/15/09 3:00 | ISCO/SEQ. TIME | 387 | 70.9 | 6.63 | 30.64 | 2172863.54 | 1504.60 | 1.33 | 7.12 | 504835.95 | 349.57 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061502 | 6/15/09 9:00 | ISCO/SEQ. TIME | 391 | 70.8 | 6.53 | 29.74 | 2104732.13 | 1457.42 | 1.73 | 8.83 | 624756.69 | 432.61 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061503 | 6/15/09 15:00 | ISCO/SEQ. TIME | 375 | 71.5 | 3.63 | 15.12 | 1081902.47 | 749.16 | 1.13 | 6.39 | 456796.81 | 316.31 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061504 | 6/15/09 21:00 | ISCO/SEQ. TIME | 377 | 72.5 | 5.63 | 26.06 | 1890540.48 | 1309.10 | 1.03 | 5.90 | 427908.45 | 296.31 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061601 | 6/16/09 3:00 | ISCO/SEQ. TIME | 377 | 70.1 | 6.33 | 29.93 | 2097785.68 | 1452.61 | 1.33 | 7.28 | 510024.83 | 353.17 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061602 | 6/16/09 9:00 | ISCO/SEQ. TIME | 388 | 69.8 | 6.23 | 28.40 | 1982344.55 | 1372.67 | 0.93 | 5.32 | 371256.06 | 257.08 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090616 | 6/16/09 9:50 | ISCO/MANUAL | 440 | 68.4 | 7.63 | 31.07 | 2124444.92 | 1471.07 | 1.03 | 5.22 | 357009.33 | 247.21 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061603 | 6/16/09 15:00 | ISCO/SEQ. TIME | 351 | 71.1 | 3.93 | 18.28 | 1299679.55 | 899.96 | 1.23 | 7.24 | 514378.25 | 356.18 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061604 | 6/16/09 21:00 | ISCO/SEQ. TIME | 241 | 69.8 | 4.83 | 36.70 | 2562638.90 | 1774.50 | 1.43 | 11.44 | 798896.53 | 553.20 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061701 | 6/17/09 3:00 | ISCO/SEQ. TIME | 357 | 73.6 | 5.13 | 24.89 | 1831272.22 | 1268.06 | 1.33 | 7.62 | 560555.57 | 388.16 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061702 | 6/17/09 9:00 | ISCO/SEQ. TIME | 366 | 73.9 | 24.13 | 132.23 | 9778169.85 | 6770.89 | 5.73 | 28.27 | 2090240.56 | 1447.39 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061703 | 6/17/09 15:00 | ISCO/SEQ. TIME | 368 | 73.1 | 6.83 | 33.61 | 2458443.84 | 1702.35 | 0.83 | 5.07 | 371125.48 | 256.99 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061704 | 6/17/09 21:00 | ISCO/SEQ. TIME | 359 | 70.4 | 7.03 | 35.74 | 2517303.51 | 1743.11 | 1.83 | 9.99 | 703835.38 | 487.37 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061801 | 6/18/09 3:00 | ISCO/SEQ. TIME | 365 | 69.4 | 6.33 | 31.08 | 2157786.68 | 1494.16 | 1.43 | 7.95 | 552073.77 | 382.28 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061802 | 6/18/09 9:00 | ISCO/SEQ. TIME | 370 | 71.4 | 6.53 | 31.72 | 2263866.70 | 1567.61 | 1.13 | 6.46 | 460859.31 | 319.12 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061803 | 6/18/09 15:00 | ISCO/SEQ. TIME | 362 | 69.6 | 4.93 | 23.33 | 1622373.10 | 1123.41 | 1.93 | 10.40 | 723237.76 | 500.81 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061804 | 6/18/09 21:00 | ISCO/SEQ. TIME | 351 | 66.9 | 4.63 | 22.43 | 1501808.65 | 1039.93 | 1.83 | 10.19 | 682426.85 | 472.55 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061901 | 6/19/09 3:00 | ISCO/SEQ. TIME | 360 | 72.5 | 4.33 | 20.01 | 1451080.41 | 1004.80 | 1.53 | 8.53 | 618223.74 | 428.09 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061902 | 6/19/09 9:00 | ISCO/SEQ. TIME | 360 | 69.2 | 4.53 | 21.17 | 1464592.65 | 1014.16 | 0.93 | 5.64 | 390313.13 | 270.27 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061903 | 6/19/09 15:00 | ISCO/SEQ. TIME | 351 | 63.0 | 3.23 | 14.13 | 890117.32 | 616.36 | 1.23 | 7.24 | 455803.90 | 315.62 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09061904 | 6/19/09 21:00 | ISCO/SEQ. TIME | 353 | 60.3 | 3.63 | 16.38 | 987480.69 | 683.78 | 0.63 | 4.26 | 256767.93 | 177.80 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062001 | 6/20/09 3:00 | ISCO/SEQ. TIME | 357 | 62.4 | 3.93 | 17.89 | 1115713.18 | 772.58 | 0.93 | 5.68 | 354176.95 | 245.25 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090620 | 6/20/09 16:10 | ISCO/MANUAL | 386 | 57.9 | 4.73 | 20.48 | 1186860.95 | 821.84 | 0.53 | 3.55 | 205514.86 | 142.31 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062004 | 6/20/09 21:00 | ISCO/SEQ. TIME | 339 | 57.5 | 1.93 | 6.82 | 392213.65 | 271.59 | 1.43 | 8.47 | 486887.40 | 337.14 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062101 | 6/21/09 3:00 | ISCO/SEQ. TIME | 354 | 59.7 | 2.93 | 12.20 | 728099.06 | 504.17 | 1.03 | 6.21 | 370296.80 | 256.41 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062201 | 6/22/09 3:00 | ISCO/SEQ. TIME | 288 | 57.6 | 2.53 | 13.26 | 763418.30 | 528.63 | 1.23 | 8.56 | 492935.15 | 341.33 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062202 | 6/22/09 9:00 | ISCO/SEQ. TIME | 225 | 56.4 | 2.33 | 16.53 | 931649.46 | 645.12 | 0.33 | 3.71 | 209023.41 | 144.74 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062203 | 6/22/09 15:00 | ISCO/SEQ. TIME | 363 | 51.3 | 4.33 | 19.81 | 1016226.74 | 703.69 | 0.63 | 4.17 | 214180.07 | 148.31 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062204 | 6/22/09 21:00 | ISCO/SEQ. TIME | 356 | 51.4 | 4.63 | 22.05 | 1133478.97 | 784.88 | 0.43 | 3.26 | 167640.80 | 116.08 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062302 | 6/23/09 9:00 | ISCO/SEQ. TIME | 365 | 50.1 | 3.73 | 16.25 | 813823.76 | 563.53 | 0.53 | 3.68 | 184512.36 | 127.77 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090623 | 6/23/09 10:35 | ISCO/MANUAL | 420 | 48.7 | 2.73 | 8.50 | 414467.00 | 287.00 | 0.73 | 4.18 | 203663.17 | 141.03 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062303 | 6/23/09 15:00 | ISCO/SEQ. TIME | 354 | 47.1 | 4.83 | 23.38 | 1100852.96 | 762.29 | 0.63 | 4.25 | 200160.70 | 138.60 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062304 | 6/23/09 21:00 | ISCO/SEQ. TIME | 340 | 46.1 | 4.43 | 22.10 | 1019165.48 | 705.72 | 0.43 | 3.36 | 154933.28 | 107.28 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062401 | 6/24/09 3:00 | ISCO/SEQ. TIME | 346 | 47.3 | 4.13 | 19.82 | 938393.48 | 649.79 | 1.33 | 7.82 | 370361.52 | 256.46 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062402 | 6/24/09 9:00 | ISCO/SEQ. TIME | 361 | 46.4 | 4.63 | 21.67 | 1005868.94 | 696.51 | 0.93 | 5.63 | 261253.14 | 180.90 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062403 | 6/24/09 15:00 | ISCO/SEQ. TIME | 343 | 43.1 | 4.83 | 24.29 | 1048057.44 | 725.73 | 0.73 | 4.85 | 209449.89 | 145.03 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062404 | 6/24/09 21:00 | ISCO/SEQ. TIME | 327 | 42.2 | 4.33 | 22.54 | 950118.59 | 657.91 | 1.03 | 6.62 | 279142.12 | 193.29 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062501 | 6/25/09 3:00 | ISCO/SEQ. TIME | 344 | 47.2 | 4.73 | 23.60 | 1114537.78 | 771.76 | 0.93 | 5.85 | 276272.87 | 191.31 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062502 | 6/25/09 9:00 | ISCO/SEQ. TIME | 356 | 48.3 | 3.23 | 13.86 | 669165.51 | 463.36 | 0.63 | 4.23 | 204372.64 | 141.52 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090625 | 6/25/09 10:05 | ISCO/MANUAL | 358 | 48.0 | 4.83 | 23.06 | 1105830.03 | 765.73 | 1.03 | 6.15 | 294917.83 | 204.22 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062503 | 6/25/09 15:00 | ISCO/SEQ. TIME | 334 | 46.0 | 5.13 | 26.95 | 1239165.16 | 858.06 | 0.83 | 5.47 | 251589.99 | 174.21 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062504 | 6/25/09 21:00 | ISCO/SEQ. TIME | 325 | 45.9 | 4.13 | 21.43 | 983556.20 | 681.06 | 0.53 | 3.99 | 183275.09 | 126.91 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062601 | 6/26/09 3:00 | ISCO/SEQ. TIME | 340 | 50.6 | 4.13 | 20.26 | 1024869.87 | 709.67 | 1.33 | 7.94 | 401675.16 | 278.14 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062602 | 6/26/09 9:00 | ISCO/SEQ. TIME | 355 | 50.2 | 4.33 | 20.37 | 1022178.83 | 707.81 | 1.33 | 7.65 | 384208.84 | 266.05 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062603 | 6/26/09 15:00 | ISCO/SEQ. TIME | 341 | 47.5 | 4.03 | 19.58 | 929907.66 | 643.91 | 1.43 | 8.43 | 400371.46 | 277.24 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062604 | 6/26/09 21:00 | ISCO/SEQ. TIME | 347 | 44.9 | 4.13 | 19.75 | 886906.67 | 614.14 | 1.03 | 6.31 | 283255.34 | 196.14 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062701 | 6/27/09 3:00 | ISCO/SEQ. TIME | 350 | 46.7 | 3.53 | 15.97 | 745741.24 | 516.39 | 0.43 | 3.30 | 153955.37 | 106.61 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062702 | 6/27/09 9:00 | ISCO/SEQ. TIME | 361 | 45.3 | 1.93 | 6.10 | 276496.91 | 191.46 | 1.53 | 8.51 | 385436.45 | 266.90 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090627 | 6/27/09 10:50 | ISCO/MANUAL | 355 | 44.0 | 3.93 | 18.02 | 793587.71 | 549.52 | 0.63 | 4.24 | 186817.84 | 129.36 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062703 | 6/27/09 15:00 | ISCO/SEQ. TIME | 349 | 41.2 | 5.03 | 24.98 | 1030242.86 | 713.39 | 1.03 | 6.28 | 258963.27 | 179.32 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062704 | 6/27/09 21:00 | ISCO/SEQ. TIME | 339 | 41.0 | 3.73 | 17.88 | 732762.63 | 507.40 | 0.43 | 3.37 | 137945.86 | 95.52 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062801 | 6/28/09 3:00 | ISCO/SEQ. TIME | 340 | 41.4 | 2.53 | 10.46 | 432699.59 | 299.62 | 1.23 | 7.43 | 307332.03 | 212.81 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062901 | 6/28/09 3:00 | ISCO/SEQ. TIME | 345 | 40.5 | 3.43 | 15.67 | 634155.55 | 439.12 | 0.73 | 4.83 | 195572.82 | 135.42 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062802 | 6/28/09 9:00 | ISCO/SEQ. TIME | 353 | 41.3 | 3.13 | 13.43 | 554306.72 | 383.83 | 0.73 | 4.75 | 196012.27 | 135.73 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062902 | 6/28/09 9:00 | ISCO/SEQ. TIME | 361 | 40.8 | 6.43 | 32.05 | 1309045.39 | 906.45 | 0.63 | 4.19 | 171147.67 | 118.51 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062803 | 6/28/09 15:00 | ISCO/SEQ. TIME | 340 | 39.7 | 4.53 | 22.71 | 902659.11 | 625.05 | 0.43 | 3.36 | 133522.03 | 92.46 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062903 | 6/28/09 15:00 | ISCO/SEQ. TIME | 340 | 38.0 | 2.83 | 12.30 | 467014.55 | 323.38 | 1.33 | 7.94 | 301492.71 | 208.77 |
| BIG CREEK ISCOST | 1444.1 | ISCOCT-BC09062804 | 6/28/09 21:00 | ISCO/SEQ. TIME | 335 | 37.6 | 3.83 | 18.77 | 706327.20 | 489.10 | 0.63 | 4.43 | 166492.25 | 115.29 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09062904 | 6/28/09 21:00 | ISCO/SEQ. TIME | 327 | 36.3 | 3.43 | 16.81 | 609738.56 | 422.21 | 3.73 | 20.91 | 758587.41 | 525.28 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090629 | 6/29/09 10:10 | ISCO/MANUAL | 515 | 39.8 | 4.13 | 11.67 | 464133.22 | 321.39 | 0.23 | 1.94 | 77308.76 | 53.53 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09063001 | 6/30/09 3:00 | ISCO/SEQ. TIME | 341 | 39.1 | 3.23 | 14.69 | 573761.26 | 397.30 | 1.03 | 6.40 | 249873.36 | 173.02 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09063002 | 6/30/09 9:00 | ISCO/SEQ. TIME | 357 | 39.7 | 3.13 | 13.22 | 525348.57 | 363.78 | 0.93 | 5.68 | 225602.80 | 156.22 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09063003 | 6/30/09 15:00 | ISCO/SEQ. TIME | 346 | 36.2 | 3.23 | 14.41 | 521414.50 | 361.05 | 1.73 | 9.82 | 355564.38 | 246.21 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09063004 | 6/30/09 21:00 | ISCO/SEQ. TIME | 332 | 36.5 | 3.03 | 13.97 | 510558.92 | 353.54 | 1.63 | 9.67 | 353276.84 | 244.63 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070101 | 7/1/09 3:00 | ISCO/SEQ. TIME | 336 | 37.5 | 2.03 | 7.55 | 282803.18 | 195.83 | 1.73 | 10.08 | 377661.24 | 261.51 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090701 | 7/1/09 15:25 | ISCO/MANUAL | 445 | 35.2 | 3.23 | 10.08 | 354759.79 | 245.65 | -0.07 | 0.90 | 31600.26 | 21.88 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070104 | 7/1/09 21:00 | ISCO/SEQ. TIME | 345 | 34.2 | 1.33 | 3.00 | 102426.55 | 70.93 | 1.13 | 6.84 | 233733.15 | 161.85 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070201 | 7/2/09 3:00 | ISCO/SEQ. TIME | 346 | 34.4 | 2.63 | 10.80 | 370980.34 | 256.89 | 1.03 | 6.32 | 217258.01 | 150.44 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070202 | 7/2/09 9:00 | ISCO/SEQ. TIME | 361 | 34.6 | 2.63 | 10.14 | 350443.70 | 242.66 | 0.93 | 5.63 | 194570.21 | 134.73 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070203 | 7/2/09 15:00 | ISCO/SEQ. TIME | 351 | 31.7 | 1.23 | 2.27 | 71940.73 | 49.82 | 1.13 | 6.74 | 213984.61 | 148.17 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070204 | 7/2/09 21:00 | ISCO/SEQ. TIME | 345 | 29.7 | 1.73 | 5.41 | 160808.68 | 111.35 | 1.33 | 7.84 | 233074.58 | 161.39 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070301 | 7/3/09 3:00 | ISCO/SEQ. TIME | 351 | 30.0 | 1.73 | 5.23 | 156862.96 | 108.62 | 1.23 | 7.24 | 216908.43 | 150.20 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070302 | 7/3/09 9:00 | ISCO/SEQ. TIME | 360 | 29.9 | 3.83 | 17.12 | 512435.42 | 354.84 | 1.03 | 6.12 | 183244.44 | 126.89 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070303 | 7/3/09 15:00 | ISCO/SEQ. TIME | 338 | 28.6 | 59.73 | 362.89 | 10370781.58 | 7181.24 | 4.33 | 23.34 | 667098.99 | 461.93 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070304 | 7/3/09 21:00 | ISCO/SEQ. TIME | 335 | 28.9 | 7.83 | 43.63 | 1260788.41 | 873.03 | 0.93 | 5.98 | 172655.24 | 119.56 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070401 | 7/4/09 3:00 | ISCO/SEQ. TIME | 346 | 29.2 | 1.83 | 5.98 | 174762.02 | 121.01 | 0.93 | 5.82 | 170085.72 | 117.78 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070402 | 7/4/09 9:00 | ISCO/SEQ. TIME | 360 | 28.8 | 1.43 | 3.24 | 93465.17 | 64.72 | 0.83 | 5.16 | 148827.63 | 103.06 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070403 | 7/4/09 15:00 | ISCO/SEQ. TIME | 345 | 28.0 | 1.63 | 4.81 | 134596.44 | 93.20 | 0.63 | 4.33 | 121253.13 | 83.96 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070404 | 7/4/09 21:00 | ISCO/SEQ. TIME | 337 | 28.7 | 1.83 | 6.28 | 180394.15 | 124.91 | 0.83 | 5.43 | 156151.35 | 108.13 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070501 | 7/5/09 3:00 | ISCO/SEQ. TIME | 344 | 29.3 | 1.13 | 1.81 | 53107.81 | 36.77 | 1.43 | 8.37 | 245445.11 | 169.96 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070502 | 7/5/09 9:00 | ISCO/SEQ. TIME | 373 | 29.0 | 1.33 | 2.39 | 69388.29 | 48.05 | 1.03 | 5.95 | 172404.03 | 119.38 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070503 | 7/5/09 15:00 | ISCO/SEQ. TIME | 370 | 28.2 | 1.63 | 4.14 | 116677.52 | 80.79 | 1.03 | 5.99 | 168655.46 | 116.79 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070504 | 7/5/09 21:00 | ISCO/SEQ. TIME | 355 | 28.0 | 3.43 | 15.09 | 422358.39 | 292.46 | 1.53 | 8.63 | 241590.92 | 167.29 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070601 | 7/6/09 3:00 | ISCO/SEQ. TIME | 366 | 28.9 | 2.03 | 6.52 | 188366.99 | 130.43 | 1.23 | 6.99 | 201902.78 | 139.81 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070602 | 7/6/09 9:00 | ISCO/SEQ. TIME | 375 | 29.0 | 2.33 | 7.91 | 229375.89 | 158.83 | 1.33 | 7.31 | 212025.91 | 146.82 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090706 | 7/6/09 10:40 | ISCO/MANUAL | 499 | 29.0 | 2.33 | 4.69 | 136238.65 | 94.34 | 0.93 | 4.40 | 127635.34 | 88.38 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070603 | 7/6/09 15:00 | ISCO/SEQ. TIME | 366 | 28.1 | 1.23 | 1.97 | 55367.18 | 38.34 | 1.83 | 9.82 | 276427.19 | 191.41 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070604 | 7/6/09 21:00 | ISCO/SEQ. TIME | 346 | 27.0 | 2.13 | 7.79 | 210530.84 | 145.78 | 1.03 | 6.32 | 170925.59 | 118.36 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070701 | 7/7/09 3:00 | ISCO/SEQ. TIME | 331 | 26.7 | 1.83 | 6.48 | 173193.32 | 119.93 | 0.93 | 6.03 | 161214.97 | 111.63 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070702 | 7/7/09 9:00 | ISCO/SEQ. TIME | 330 | 26.3 | 2.03 | 7.78 | 204574.04 | 141.66 | 0.83 | 5.52 | 145273.67 | 100.59 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070703 | 7/7/09 15:00 | ISCO/SEQ. TIME | 327 | 25.4 | 1.13 | 2.17 | 55018.74 | 38.10 | 1.03 | 6.62 | 168242.60 | 116.50 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070704 | 7/7/09 21:00 | ISCO/SEQ. TIME | 320 | 24.8 | 1.73 | 6.23 | 154196.02 | 106.77 | 0.83 | 5.66 | 140153.80 | 97.05 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070801 | 7/8/09 3:00 | ISCO/SEQ. TIME | 329 | 24.1 | 1.33 | 3.39 | 81638.95 | 56.53 | 1.33 | 8.17 | 196831.47 | 136.30 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070802 | 7/8/09 9:00 | ISCO/SEQ. TIME | 333 | 24.2 | 1.03 | 1.41 | 34122.45 | 23.63 | 1.03 | 6.52 | 157800.54 | 109.27 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070803 | 7/8/09 15:00 | ISCO/SEQ. TIME | 352 | 24.5 | 0.83 | 2.36 | 57854.15 | 40.06 | 0.23 | 2.30 | 56464.59 | 39.10 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070804 | 7/8/09 21:00 | ISCO/SEQ. TIME | 335 | 24.8 | 1.03 | 1.37 | 34010.57 | 23.55 | 0.73 | 4.94 | 122482.92 | 84.81 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070901 | 7/9/09 3:00 | ISCO/SEQ. TIME | 339 | 23.9 | 2.13 | 8.05 | 192493.69 | 133.29 | 0.43 | 3.37 | 80459.21 | 55.71 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070902 | 7/9/09 9:00 | ISCO/SEQ. TIME | 346 | 23.1 | 1.53 | 4.18 | 96656.44 | 66.93 | 0.73 | 4.82 | 111572.34 | 77.26 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070903 | 7/9/09 15:00 | ISCO/SEQ. TIME | 336 | 22.0 | 0.63 | 1.87 | 41185.19 | 28.52 | 0.63 | 4.42 | 96991.68 | 67.16 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09070904 | 7/9/09 21:00 | ISCO/SEQ. TIME | 245 | 21.4 | 1.23 | 5.42 | 116144.70 | 80.42 | 0.63 | 5.62 | 120377.23 | 83.36 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071001 | 7/10/09 3:00 | ISCO/SEQ. TIME | 135 | 21.3 | 1.63 | 20.11 | 427918.52 | 296.31 | 0.83 | 11.81 | 251349.05 | 174.05 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071002 | 7/10/09 9:00 | ISCO/SEQ. TIME | 185 | 21.2 | 0.83 | 4.31 | 91600.46 | 63.43 | 0.83 | 8.94 | 189830.86 | 131.45 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090710 | 7/10/09 11:25 | ISCO/MANUAL | 461 | 20.6 | 2.23 | 5.04 | 103740.34 | 71.83 | 0.33 | 2.41 | 49571.54 | 34.33 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071004 | 7/10/09 21:00 | ISCO/SEQ. TIME | 313 | 19.7 | 1.63 | 5.81 | 114567.03 | 79.33 | 0.73 | 5.21 | 102620.64 | 71.06 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071101 | 7/11/09 3:00 | ISCO/SEQ. TIME | 312 | 19.4 | 1.43 | 4.51 | 87767.93 | 60.77 | 1.43 | 9.10 | 177022.18 | 122.58 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071102 | 7/11/09 9:00 | ISCO/SEQ. TIME | 330 | 19.3 | 1.93 | 7.15 | 137861.20 | 95.46 | 1.23 | 7.62 | 147006.08 | 101.79 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071103 | 7/11/09 15:00 | ISCO/SEQ. TIME | 315 | 18.7 | 0.83 | 0.46 | 8563.97 | 5.93 | 1.23 | 7.93 | 148644.82 | 102.93 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071104 | 7/11/09 21:00 | ISCO/SEQ. TIME | 305 | 18.5 | 1.53 | 5.42 | 100179.45 | 69.37 | 0.83 | 5.88 | 108789.74 | 75.33 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071201 | 7/12/09 3:00 | ISCO/SEQ. TIME | 286 | 18.4 | 2.43 | 12.66 | 233207.01 | 161.48 | 1.23 | 8.61 | 158669.71 | 109.87 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071202 | 7/12/09 9:00 | ISCO/SEQ. TIME | 307 | 18.4 | 2.23 | 10.09 | 186183.53 | 128.92 | 0.53 | 4.16 | 76700.35 | 53.11 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071203 | 7/12/09 15:00 | ISCO/SEQ. TIME | 303 | 18.0 | 0.73 | 2.41 | 43395.54 | 30.05 | 1.63 | 10.48 | 188790.52 | 130.73 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071301 | 7/13/09 3:00 | ISCO/SEQ. TIME | 198 | 17.8 | 1.13 | 6.85 | 122324.66 | 84.70 | 1.23 | 11.92 | 212810.68 | 147.36 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071302 | 7/13/09 9:00 | ISCO/SEQ. TIME | 256 | 18.0 | 2.43 | 14.73 | 265900.07 | 184.12 | 0.93 | 7.46 | 134596.92 | 93.20 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090713 | 7/13/09 11:35 | ISCO/MANUAL | 390 | 17.8 | 1.33 | 2.07 | 36939.59 | 25.58 | 0.83 | 4.85 | 86574.75 | 59.95 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071403 | 7/14/09 15:00 | ISCO/SEQ. TIME | 315 | 18.0 | 1.33 | 3.76 | 67833.98 | 46.97 | 1.63 | 10.13 | 182617.47 | 126.45 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071404 | 7/14/09 21:00 | ISCO/SEQ. TIME | 296 | 18.3 | 1.53 | 5.73 | 104754.80 | 72.54 | 1.63 | 10.70 | 195554.38 | 135.41 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071501 | 7/15/09 3:00 | ISCO/SEQ. TIME | 304 | 18.4 | 1.63 | 6.13 | 112736.65 | 78.06 | 1.13 | 7.60 | 139747.30 | 96.77 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071502 | 7/15/09 9:00 | ISCO/SEQ. TIME | 323 | 18.1 | 2.03 | 8.06 | 145447.28 | 100.71 | 1.73 | 10.44 | 188502.61 | 130.53 |
| BIG CREEK ISCOMC | 1444.1 | ISCOMC-BC090715 | 7/15/09 9:40 | ISCO/MANUAL | 307 | 16.3 | 0.63 | 2.05 | 33456.99 | 23.17 | 0.53 | 4.16 | 67797.50 | 46.95 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071503 | 7/15/09 15:00 | ISCO/SEQ. TIME | 316 | 17.2 | 1.53 | 5.05 | 86675.26 | 60.02 | 1.03 | 6.81 | 116882.01 | 80.93 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071504 | 7/15/09 21:00 | ISCO/SEQ. TIME | 302 | 16.9 | 1.43 | 4.83 | 81519.86 | 56.45 | 1.23 | 8.22 | 138748.25 | 96.08 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071601 | 7/16/09 3:00 | ISCO/SEQ. TIME | 312 | 16.7 | 1.53 | 5.18 | 86449.69 | 59.86 | 0.93 | 6.33 | 105619.67 | 73.14 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071602 | 7/16/09 9:00 | ISCO/SEQ. TIME | 326 | 16.5 | 1.53 | 4.74 | 78326.55 | 54.24 | 0.73 | 5.05 | 83345.46 | 57.71 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071603 | 7/16/09 15:00 | ISCO/SEQ. TIME | 320 | 16.0 | 1.53 | 4.93 | 78728.76 | 54.52 | 1.13 | 7.28 | 116400.33 | 80.60 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071604 | 7/16/09 21:00 | ISCO/SEQ. TIME | 299 | 15.9 | 0.73 | 0.05 | 858.99 | 0.59 | 2.03 | 12.92 | 205375.08 | 142.21 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071701 | 7/17/09 3:00 | ISCO/SEQ. TIME | 305 | 15.7 | 1.03 | 2.00 | 31522.95 | 21.83 | 1.93 | 12.12 | 190888.33 | 132.18 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071702 | 7/17/09 9:00 | ISCO/SEQ. TIME | 312 | 15.7 | 1.03 | 1.84 | 28862.49 | 19.99 | 1.93 | 11.88 | 185882.28 | 128.71 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071703 | 7/17/09 15:00 | ISCO/SEQ. TIME | 401 | 15.2 | 1.33 | 1.88 | 28450.22 | 19.70 | 2.73 | 12.95 | 196416.85 | 136.01 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071704 | 7/17/09 21:00 | ISCO/SEQ. TIME | 442 | 15.0 | 1.03 | 2.33 | 34994.90 | 24.23 | 1.93 | 8.73 | 131069.87 | 90.76 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071801 | 7/18/09 3:00 | ISCO/SEQ. TIME | 455 | 14.9 | 0.93 | 2.04 | 30447.72 | 21.08 | 1.83 | 8.13 | 121132.69 | 83.88 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071802 | 7/18/09 9:00 | ISCO/SEQ. TIME | 473 | 14.9 | 0.43 | 0.91 | 13532.52 | 9.37 | 2.13 | 8.96 | 133443.36 | 92.40 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071803 | 7/18/09 15:00 | ISCO/SEQ. TIME | 455 | 14.5 | 1.13 | 0.14 | 2050.91 | 1.42 | 2.23 | 9.65 | 139833.98 | 96.83 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071804 | 7/18/09 21:00 | ISCO/SEQ. TIME | 450 | 14.4 | 0.73 | 1.62 | 23384.35 | 16.19 | 2.33 | 10.13 | 146054.30 | 101.14 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071901 | 7/19/09 3:00 | ISCO/SEQ. TIME | 457 | 14.4 | 1.03 | 2.25 | 32430.03 | 22.46 | 2.83 | 11.89 | 171061.72 | 118.45 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071902 | 7/19/09 9:00 | ISCO/SEQ. TIME | 469 | 14.4 | 1.83 | 3.09 | 44553.43 | 30.85 | 2.13 | 9.03 | 130016.17 | 90.03 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071903 | 7/19/09 15:00 | ISCO/SEQ. TIME | 464 | 14.0 | 22.13 | 94.27 | 1317093.00 | 912.02 | 1.73 | 7.62 | 106513.38 | 73.76 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09071904 | 7/19/09 21:00 | ISCO/SEQ. TIME | 458 | 13.9 | 1.83 | 3.29 | 45707.70 | 31.65 | 1.73 | 7.71 | 107094.77 | 74.16 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072001 | 7/20/09 3:00 | ISCO/SEQ. TIME | 459 | 13.7 | 1.93 | 3.73 | 51209.76 | 35.46 | 2.53 | 10.71 | 147233.03 | 101.95 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072002 | 7/20/09 9:00 | ISCO/SEQ. TIME | 469 | 13.8 | 1.33 | 0.88 | 12085.82 | 8.37 | 2.33 | 9.77 | 134921.44 | 93.43 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072003 | 7/20/09 15:00 | ISCO/SEQ. TIME | 468 | 13.5 | 0.73 | 1.56 | 21027.39 | 14.56 | 2.93 | 12.01 | 161853.08 | 112.08 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072004 | 7/20/09 21:00 | ISCO/SEQ. TIME | 455 | 13.3 | 0.13 | 0.29 | 3800.59 | 2.63 | 2.93 | 12.32 | 163828.24 | 113.44 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072101 | 7/21/09 3:00 | ISCO/SEQ. TIME | 455 | 13.3 | 1.53 | 1.97 | 26262.22 | 18.19 | 2.03 | 8.89 | 118430.79 | 82.01 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072102 | 7/21/09 9:00 | ISCO/SEQ. TIME | 475 | 13.4 | 2.13 | 4.31 | 57654.52 | 39.92 | 1.43 | 6.38 | 85417.31 | 59.15 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072103 | 7/21/09 15:00 | ISCO/SEQ. TIME | 467 | 13.1 | 2.43 | 5.80 | 75965.54 | 52.60 | 1.33 | 6.10 | 79829.31 | 55.28 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072104 | 7/21/09 21:00 | ISCO/SEQ. TIME | 460 | 13.0 | 2.33 | 5.52 | 71656.51 | 49.62 | 1.43 | 6.55 | 85090.42 | 58.92 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072201 | 7/22/09 3:00 | ISCO/SEQ. TIME | 455 | 13.0 | 2.23 | 5.17 | 67099.31 | 46.46 | 1.53 | 6.99 | 90638.77 | 62.76 |
| BIG CREEK ISCOST | 1444.1 | ISCOST-BC09072203 | 7/22/09 12:00 | ISCO/SEQ. TIME | 120 | 12.0 | 1.03 | 12.84 | 153681.88 | 106.42 | 0.93 | 14.58 | 174537.97 | 120.86 |
| CLIFF | 18.8 | CF090521A | 5/21/09 15:30 | ISOK | 520 | 0.8 | 7.03 | 13.52 | 10391.30 | 552.53 | 3.13 | 6.02 | 4626.57 | 246.01 |
| CLIFF | 18.8 | CF090522A | 5/22/09 19:00 | ISOK | 523 | 0.9 | 43.03 | 82.28 | 70259.15 | 3735.84 | 1.93 | 3.69 | 3151.29 | 167.56 |
| CLIFF | 18.8 | CF090523A | 5/23/09 14:00 | ISOK | 527 | 0.7 | 6.83 | 12.96 | 8543.11 | 454.26 | -0.67 | | | |
| CLIFF | 18.8 | CF090524A | 5/24/09 10:00 | ISOK | 400 | 0.9 | 15.13 | 37.83 | 35333.74 | 1878.77 | 2.63 | 6.57 | 6141.95 | 326.58 |
| CLIFF | 18.8 | CF090525A | 5/25/09 14:30 | ISOK | 439 | 1.0 | 5.23 | 11.91 | 12051.41 | 640.80 | 0.23 | 0.52 | 529.99 | 28.18 |
| CLIFF | 18.8 | CF090526A | 5/26/09 14:25 | ISOK | 440 | 0.8 | 3.73 | 8.48 | 6586.21 | 350.20 | 0.23 | 0.52 | 406.12 | 21.59 |
| CLIFF | 18.8 | CF090527A | 5/27/09 11:15 | ISOK | 419 | 0.8 | 7.13 | 17.02 | 14358.16 | 763.46 | 0.83 | 1.98 | 1671.43 | 88.87 |
| CLIFF | 18.8 | CF090528A | 5/28/09 10:15 | ISOK | 336 | 0.8 | 6.23 | 18.54 | 15351.31 | 816.26 | 0.43 | 1.28 | 1059.56 | 56.34 |
| CLIFF | 18.8 | CF090529A | 5/29/09 10:25 | ISOK | 403 | 0.8 | 3.93 | 9.75 | 7846.33 | 417.21 | 0.53 | 1.32 | 1058.16 | 56.26 |
| CLIFF | 18.8 | CF090531A | 5/31/09 18:45 | ISOK | 459 | 0.9 | 5.03 | 10.96 | 9426.74 | 501.24 | -0.57 | | | |
| CLIFF | 18.8 | CF090601A | 6/1/09 11:10 | ISOK | 374 | 0.6 | 6.13 | 16.39 | 9877.71 | 525.22 | -3.47 | | | |
| CLIFF | 18.8 | CF090602A | 6/2/09 9:40 | ISOK | 452 | 0.5 | 4.33 | 9.58 | 4869.20 | 258.91 | 0.43 | 0.95 | 483.55 | 25.71 |
| CLIFF | 18.8 | CF090603A | 6/3/09 8:15 | ISOK | 508 | 0.5 | 3.93 | 7.74 | 3688.61 | 196.13 | -0.27 | | | |
| CLIFF | 18.8 | CF090604A | 6/4/09 10:45 | ISOK | 377 | 0.5 | 3.03 | 8.04 | 3729.78 | 198.32 | -0.07 | | | |
| CLIFF | 18.8 | CF090605A | 6/5/09 9:50 | ISOK | 401 | 0.4 | 2.63 | 6.56 | 2900.51 | 154.23 | -0.07 | | | |
| CLIFF | 18.8 | CF096060A | 6/6/09 11:50 | ISOK | 357 | 0.4 | 3.13 | 8.77 | 3943.35 | 209.68 | -0.47 | | | |
| CLIFF | 18.8 | CF090606B | 6/6/09 14:15 | ISOK | 481 | 0.5 | 2.53 | 5.26 | 2408.57 | 128.07 | 0.93 | 1.93 | 885.36 | 47.08 |
| CLIFF | 18.8 | CF090607A | 6/7/09 10:00 | ISOK | 420 | 0.4 | 2.53 | 6.02 | 2648.67 | 140.84 | 0.43 | 1.02 | 450.17 | 23.94 |
| CLIFF | 18.8 | CF090611A | 6/11/09 11:45 | ISOK | 296 | 0.3 | 1.53 | 5.17 | 1792.63 | 95.32 | -0.17 | | | |
| CLIFF | 18.8 | CF090612A | 6/12/09 10:50 | ISOK | 319 | 0.3 | 1.13 | 3.54 | 1182.20 | 62.86 | 0.03 | 0.09 | 31.39 | 1.67 |
| CLIFF | 18.8 | CF090614 | 6/14/09 10:30 | ISOK | 195 | 0.3 | 1.73 | 8.87 | 2869.34 | 152.57 | 0.23 | 1.18 | 381.47 | 20.28 |
| CLIFF | 18.8 | CF090620 | 6/20/09 15:30 | ISOK | 310 | 0.3 | 1.13 | 3.65 | 938.38 | 49.90 | -0.07 | | | |
| CLIFF | 18.8 | CF090623 | 6/23/09 10:00 | ISOK | 295 | 0.3 | 0.83 | 2.81 | 766.44 | 40.75 | 0.13 | 0.44 | 120.05 | 6.38 |
| CLIFF | 18.8 | CF090625 | 6/25/09 9:25 | ISOK | 429 | 0.3 | 0.43 | 1.00 | 266.09 | 14.15 | 0.83 | 1.93 | 513.62 | 27.31 |
| CLIFF | 18.8 | CF090627 | 6/27/09 9:30 | ISOK | 386 | 0.2 | 1.63 | 4.22 | 1020.57 | 54.27 | 0.23 | 0.60 | 144.01 | 7.66 |
| CLIFF | 18.8 | CF090701 | 7/1/09 14:45 | ISOK | 327 | 0.2 | 1.23 | 3.76 | 749.56 | 39.86 | 1.53 | 4.68 | 932.38 | 49.58 |
| CLIFF | 18.8 | CF090704 | 7/4/09 8:35 | ISOK | 339 | 0.2 | 0.73 | 2.15 | 412.45 | 21.93 | 0.13 | 0.38 | 73.45 | 3.91 |
| CLIFF | 18.8 | CF090706 | 7/6/09 10:10 | ISOK | 270 | 0.2 | 1.73 | 6.41 | 1213.28 | 64.51 | 0.03 | 0.11 | 21.04 | 1.12 |
| CLIFF | 18.8 | CF090709 | 7/9/09 10:55 | ISOK | 315 | 0.2 | 0.23 | 0.73 | 123.90 | 6.59 | 1.23 | 3.90 | 662.58 | 35.23 |
| CLIFF | 18.8 | CF090713 | 7/13/09 11:00 | ISOK | 325 | 0.1 | 0.63 | 1.94 | 286.66 | 15.24 | 0.23 | 0.71 | 104.65 | 5.56 |
| CLIFF | 18.8 | CF090715 | 7/15/09 9:15 | ISOK | 369 | 0.1 | 0.33 | 0.89 | 126.31 | 6.72 | 0.53 | 1.44 | 202.87 | 10.79 |
| CLIFF | 18.8 | CF090723 | 7/23/09 12:20 | ISOK | 220 | 0.1 | 1.03 | 4.68 | 552.72 | 29.39 | 0.13 | 0.59 | 69.76 | 3.71 |
| CLIFF | 18.8 | CF090725 | 7/25/09 12:35 | ISOK | 234 | 0.1 | 0.73 | 3.12 | 354.31 | 18.84 | 1.03 | 4.40 | 499.92 | 26.58 |
| COUGAR | 21.4 | CG090523 | 5/23/09 13:00 | ISOK | 505 | 0.6 | 2.93 | 5.80 | 3724.19 | 173.98 | 0.83 | 1.64 | 1054.98 | 49.28 |
| COUGAR | 21.4 | CG090601 | 6/1/09 10:05 | ISOK | 456 | 0.6 | 6.53 | 14.32 | 8524.79 | 398.24 | 1.53 | 3.36 | 1997.39 | 93.31 |
| COUGAR | 21.4 | CG090619 | 6/19/09 16:20 | ISOK | 233 | 0.3 | 1.63 | 7.00 | 1849.10 | 86.38 | 0.83 | 3.56 | 941.57 | 43.99 |
| COUGAR | 21.4 | CG090626 | 6/26/09 13:15 | ISOK | 242 | 0.2 | 0.63 | 2.60 | 490.89 | 22.93 | 0.83 | 3.43 | 646.73 | 30.21 |
| COUGAR | 21.4 | CG090702 | 7/2/09 10:45 | ISOK | 362 | 0.1 | 1.53 | 4.23 | 588.27 | 27.48 | 0.23 | 0.64 | 88.43 | 4.13 |
| COUGAR | 21.4 | CG090721 | 7/21/09 10:35 | GRAB | 312 | 0.1 | 0.83 | 2.66 | 196.30 | 9.17 | 1.13 | 3.62 | 267.25 | 12.48 |
| DUNCE | 6.5 | DU090523 | 5/23/09 11:30 | ISOK | 191 | 0.2 | 2.73 | 14.29 | 2597.98 | 400.72 | 1.03 | 5.39 | 980.19 | 151.19 |
| DUNCE | 6.5 | DU090619 | 6/19/09 14:00 | ISOK | 366 | 0.1 | 2.03 | 5.55 | 495.34 | 76.40 | 1.03 | 2.81 | 251.33 | 38.77 |
| DUNCE | 6.5 | DU090626 | 6/26/09 11:25 | ISOK | 464 | 0.1 | 1.53 | 3.30 | 250.04 | 38.57 | 1.93 | 4.16 | 315.41 | 48.65 |
| DUNCE | 6.5 | DU090702 | 7/2/09 9:00 | ISOK | 320 | 0.1 | 1.73 | 5.41 | 294.58 | 45.44 | 1.73 | 5.41 | 294.58 | 45.44 |
| GOAT | 7.9 | GO090523 | 5/23/09 12:25 | ISOK | 309 | 0.1 | 8.83 | 28.58 | 2004.03 | 254.81 | 4.53 | 14.66 | 1028.11 | 130.73 |
| GOAT | 7.9 | GO090601 | 6/1/09 9:40 | ISOK | 329 | 0.0 | 3.53 | 10.73 | 91.86 | 11.68 | 4.13 | 12.55 | 107.48 | 13.67 |
| GOAT | 7.9 | GO090611 | 6/11/09 10:10 | ISOK | 195 | 0.0 | 2.53 | 12.97 | 291.27 | 37.04 | 2.03 | 10.41 | 233.71 | 29.72 |
| GOAT | 7.9 | GO090619 | 6/19/09 15:50 | ISOK | 258 | 0.0 | 0.23 | 0.89 | 17.15 | 2.18 | 4.63 | 17.95 | 345.19 | 43.89 |
| GOAT | 7.9 | GO090626 | 6/26/09 12:40 | ISOK | 304 | 0.0 | 3.13 | 10.30 | 162.57 | 20.67 | 2.23 | 7.34 | 115.83 | 14.73 |
| GOAT | 7.9 | GO090702 | 7/2/09 10:20 | ISOK | 255 | 0.0 | 2.13 | 8.35 | 110.47 | 14.05 | 1.83 | 7.18 | 94.91 | 12.07 |
| GOAT | 7.9 | GO090721 | 7/21/09 10:05 | GRAB | 317 | 0.0 | 1.73 | 5.46 | 44.01 | 5.60 | 2.23 | 7.03 | 56.73 | 7.21 |
| PIONEER | 15.9 | PI090521A | 5/21/09 9:30 | ISOK | 527 | 0.3 | 24.73 | 46.93 | 15076.83 | 950.19 | 2.93 | 5.56 | 1786.30 | 112.58 |
| PIONEER | 15.9 | PI090522A | 5/22/09 16:50 | ISOK | 437 | 0.3 | 4.73 | 10.82 | 2886.37 | 181.91 | 1.03 | 2.36 | 628.53 | 39.61 |
| PIONEER | 15.9 | PI090524A | 5/24/09 6:45 | ISOK | 492 | 0.3 | 9.73 | 19.78 | 6056.96 | 381.73 | 2.13 | 4.33 | 1325.93 | 83.56 |
| PIONEER | 15.9 | PI090525A | 5/25/09 13:55 | ISOK | 482 | 0.4 | 9.73 | 20.19 | 7570.76 | 477.13 | 0.93 | 1.93 | 723.62 | 45.60 |
| PIONEER | 15.9 | PI090526A | 5/26/09 12:50 | ISOK | 386 | 0.3 | 10.63 | 27.54 | 8632.57 | 544.05 | 1.53 | 3.96 | 1242.51 | 78.31 |
| PIONEER | 15.9 | PI090527A | 5/27/09 15:10 | ISOK | 365 | 0.3 | 2.73 | 7.48 | 1964.67 | 123.82 | 1.43 | 3.92 | 1029.11 | 64.86 |
| PIONEER | 15.9 | PI090528A | 5/28/09 10:35 | ISOK | 313 | 0.3 | 3.33 | 10.64 | 2987.34 | 188.27 | 1.43 | 4.57 | 1282.85 | 80.85 |
| PIONEER | 15.9 | PI090529A | 5/29/09 11:10 | ISOK | 313 | 0.3 | 2.03 | 6.49 | 1869.68 | 117.83 | 1.33 | 4.25 | 1224.96 | 77.20 |
| PIONEER | 15.9 | PI090531A | 5/31/09 18:25 | ISOK | 421 | 0.3 | 3.73 | 8.86 | 2561.49 | 161.43 | 1.33 | 3.16 | 913.35 | 57.56 |
| PIONEER | 15.9 | PI090602A | 6/2/09 12:00 | ISOK | 344 | 0.4 | 2.23 | 6.48 | 2764.73 | 174.24 | 1.23 | 3.58 | 1524.94 | 96.11 |
| PIONEER | 15.9 | PI090603A | 6/3/09 9:25 | ISOK | 399 | 0.3 | 3.33 | 8.35 | 2362.42 | 148.89 | 0.53 | 1.33 | 376.00 | 23.70 |
| PIONEER | 15.9 | PI090604A | 6/4/09 14:50 | ISOK | 270 | 0.3 | 2.73 | 10.11 | 2541.65 | 160.18 | 0.93 | 3.44 | 865.84 | 54.57 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PIONEER | 15.9 | PI090605A | 6/5/09 9:10 | ISOK | 237 | 0.3 | 1.83 | 7.72 | 2203.38 | 138.86 | 1.13 | 4.77 | 1360.55 | 85.75 |
| PIONEER | 15.9 | PI090606A | 6/6/09 9:55 | ISOK | 255 | 0.3 | 2.03 | 7.96 | 2437.91 | 153.64 | 1.53 | 6.00 | 1837.44 | 115.80 |
| PIONEER | 15.9 | PI090607A | 6/7/09 14:10 | ISOK | 380 | 0.3 | 2.93 | 7.71 | 2623.30 | 165.33 | 1.23 | 3.24 | 1101.25 | 69.40 |
| PIONEER | 15.9 | PI090610A | 6/10/09 13:05 | ISOK | 285 | 0.2 | 3.43 | 12.04 | 2972.09 | 187.31 | 0.13 | 0.46 | 112.64 | 7.10 |
| PIONEER | 15.9 | PI090612A | 6/12/09 10:20 | ISOK | 368 | 0.3 | 0.93 | 2.53 | 648.92 | 40.90 | 1.53 | 4.16 | 1067.57 | 67.28 |
| PIONEER | 15.9 | PI090613 | 6/13/09 9:10 | ISOK | 323 | 0.2 | 2.23 | 6.90 | 1530.42 | 96.45 | 1.23 | 3.81 | 844.13 | 53.20 |
| PIONEER | 15.9 | PI090614 | 6/14/09 10:05 | ISOK | 291 | 0.2 | 8.03 | 27.59 | 5986.08 | 377.26 | 0.23 | 0.79 | 171.46 | 10.81 |
| PIONEER | 15.9 | PI090615 | 6/15/09 14:10 | ISOK | 341 | 0.2 | 3.23 | 9.47 | 1890.59 | 119.15 | 0.93 | 2.73 | 544.35 | 34.31 |
| PIONEER | 15.9 | PI090617 | 6/17/09 10:55 | ISOK | 279 | 0.2 | 3.03 | 10.86 | 2206.69 | 139.07 | 1.03 | 3.69 | 750.13 | 47.28 |
| PIONEER | 15.9 | PI090620 | 6/20/09 12:00 | ISOK | 374 | 0.2 | 1.33 | 3.56 | 706.94 | 44.55 | 1.43 | 3.82 | 760.09 | 47.90 |
| PIONEER | 15.9 | PI090621 | 6/21/09 11:15 | ISOK | 325 | 0.2 | 3.03 | 9.32 | 1762.63 | 111.09 | 1.13 | 3.48 | 657.35 | 41.43 |
| PIONEER | 15.9 | PI090623 | 6/23/09 10:55 | ISOK | 394 | 0.2 | 1.33 | 3.38 | 674.92 | 42.54 | 0.93 | 2.36 | 471.94 | 29.74 |
| PIONEER | 15.9 | PI090625 | 6/25/09 11:20 | ISOK | 279 | 0.2 | 3.93 | 14.09 | 2365.06 | 149.05 | 0.63 | 2.26 | 379.13 | 23.89 |
| PIONEER | 15.9 | PI090627 | 6/27/09 11:05 | ISOK | 446 | 0.2 | 1.23 | 2.76 | 446.94 | 28.17 | 0.93 | 2.09 | 337.93 | 21.30 |
| PIONEER | 15.9 | PI090629 | 6/29/09 9:20 | ISOK | 366 | 0.1 | 0.53 | 1.45 | 204.04 | 12.86 | 1.13 | 3.09 | 435.03 | 27.42 |
| PIONEER | 15.9 | PI090704 | 7/4/09 8:20 | ISOK | 404 | 0.1 | 2.33 | 5.77 | 772.87 | 48.71 | 0.03 | 0.07 | 9.95 | 0.63 |
| PIONEER | 15.9 | PI090706 | 7/6/09 13:30 | ISOK | 377 | 0.1 | 1.93 | 5.12 | 663.65 | 41.83 | 1.13 | 3.00 | 388.56 | 24.49 |
| PIONEER | 15.9 | PI090709 | 7/9/09 11:25 | ISOK | 344 | 0.1 | 1.83 | 5.32 | 561.72 | 35.40 | 0.23 | 0.67 | 70.60 | 4.45 |
| PIONEER | 15.9 | PI090713 | 7/13/09 11:50 | ISOK | 250 | 0.1 | 1.03 | 4.12 | 428.99 | 27.04 | 0.83 | 3.32 | 345.69 | 21.79 |
| PIONEER | 15.9 | PI090715 | 7/15/09 10:00 | ISOK | 316 | 0.1 | 1.63 | 5.16 | 512.76 | 32.32 | 0.33 | 1.04 | 103.81 | 6.54 |
| PIONEER | 15.9 | PI090717 | 7/17/09 9:55 | ISOK | 286 | 0.1 | 0.53 | 1.85 | 182.35 | 11.49 | 1.23 | 4.30 | 423.19 | 26.67 |
| PIONEER | 15.9 | PI090724 | 7/24/09 13:35 | ISOK | 404 | 0.1 | 1.63 | 4.03 | 304.25 | 19.17 | 1.23 | 3.04 | 229.58 | 14.47 |
| RUSH | 243.4 | RU090521A | 5/21/09 11:25 | ISOK | 367 | 7.4 | 35.03 | 95.45 | 708283.03 | 2910.08 | 4.13 | 11.25 | 83505.82 | 343.10 |
| RUSH | 243.4 | RU090523A | 5/23/09 16:45 | ISOK | 510 | 6.3 | 10.63 | 20.84 | 132297.44 | 543.56 | 1.53 | 3.00 | 19041.87 | 78.24 |
| RUSH | 243.4 | RU090525A | 5/25/09 10:25 | ISOK | 475 | 7.9 | 35.73 | 75.22 | 593970.56 | 2440.41 | 3.13 | 6.59 | 52032.69 | 213.78 |
| RUSH | 243.4 | RU090526A | 5/26/09 11:00 | ISOK | 507 | 6.0 | 18.13 | 35.76 | 214399.01 | 880.89 | 1.93 | 3.81 | 22823.50 | 93.77 |
| RUSH | 243.4 | RU090527A | 5/27/09 11:55 | ISOK | 486 | 5.1 | 11.53 | 23.72 | 119975.10 | 492.93 | 1.73 | 3.56 | 18001.47 | 73.96 |
| RUSH | 243.4 | RU090528A | 5/28/09 9:15 | ISOK | 485 | 6.7 | 13.93 | 28.72 | 193127.09 | 793.49 | 2.03 | 4.19 | 28144.15 | 115.63 |
| RUSH | 243.4 | RU090529A | 5/29/09 12:50 | ISOK | 441 | 6.5 | 13.73 | 31.13 | 203032.80 | 834.19 | 1.93 | 4.38 | 28539.93 | 117.26 |
| RUSH | 243.4 | RU090531A | 5/31/09 16:30 | ISOK | 492 | 8.3 | 19.73 | 40.10 | 334144.45 | 1372.88 | 2.23 | 4.53 | 37766.96 | 155.17 |
| RUSH | 243.4 | RU090601A | 6/1/09 12:55 | ISOK | 514 | 8.6 | 13.83 | 26.91 | 231390.34 | 950.70 | 1.43 | 2.78 | 23925.39 | 98.30 |
| RUSH | 243.4 | RU090602A | 6/2/09 10:40 | ISOK | 470 | 6.0 | 10.63 | 22.62 | 135054.01 | 554.89 | 1.73 | 3.68 | 21979.63 | 90.31 |
| RUSH | 243.4 | RU090603A | 6/3/09 15:10 | ISOK | 532 | 5.7 | 9.63 | 18.10 | 103331.08 | 424.55 | 2.13 | 4.00 | 22855.16 | 93.90 |
| RUSH | 243.4 | RU090604A | 6/4/09 8:55 | ISOK | 540 | 7.7 | 57.93 | 107.28 | 823200.78 | 3382.24 | 6.23 | 11.54 | 88529.96 | 363.74 |
| RUSH | 243.4 | RU096010A | 6/10/09 14:15 | ISOK | 406 | 4.4 | 6.73 | 16.58 | 73158.38 | 300.58 | 1.43 | 3.52 | 15544.80 | 63.87 |
| RUSH | 243.4 | RU090612A | 6/12/09 13:55 | ISOK | 450 | 3.6 | 4.63 | 10.29 | 37344.72 | 153.44 | 1.53 | 3.40 | 12340.70 | 50.70 |
| RUSH | 243.4 | RU090615 | 6/15/09 11:30 | ISOK | 400 | 3.3 | 3.63 | 9.08 | 29503.57 | 121.22 | 1.03 | 2.57 | 8371.54 | 34.40 |
| RUSH | 243.4 | RU090616 | 6/16/09 16:00 | ISOK | 407 | 2.9 | 4.73 | 11.62 | 33299.60 | 136.82 | 1.13 | 2.78 | 7955.30 | 32.69 |
| RUSH | 243.4 | RU09061724 | 6/17/09 13:10 | GRAB | 472 | 3.4 | 4.43 | 9.39 | 31490.74 | 129.38 | 0.63 | 1.33 | 4478.37 | 18.40 |
| RUSH | 243.4 | RU09061723 | 6/17/09 13:40 | GRAB | 478 | 3.3 | 4.73 | 9.90 | 32806.10 | 134.79 | 1.03 | 2.15 | 7143.82 | 29.35 |
| RUSH | 243.4 | RU090621 | 6/21/09 13:10 | ISOK | 414 | 3.0 | 1.93 | 4.66 | 13797.34 | 56.69 | 0.63 | 1.52 | 4503.79 | 18.50 |
| RUSH | 243.4 | RU090623 | 6/23/09 14:15 | ISOK | 425 | 2.8 | 1.93 | 4.54 | 12647.79 | 51.97 | 1.13 | 2.66 | 7405.19 | 30.43 |
| RUSH | 243.4 | RU090625 | 6/25/09 15:35 | ISOK | 530 | 2.6 | 2.83 | 5.34 | 13984.74 | 57.46 | 1.63 | 3.08 | 8054.81 | 33.09 |
| RUSH | 243.4 | RU090627 | 6/27/09 14:45 | ISOK | 513 | 2.4 | 2.63 | 5.13 | 12342.94 | 50.71 | 1.03 | 2.01 | 4833.93 | 19.86 |
| RUSH | 243.4 | RU090629 | 6/29/09 10:45 | ISOK | 515 | 2.2 | 3.03 | 5.88 | 13052.33 | 53.63 | 0.43 | 0.83 | 1852.31 | 7.61 |
| RUSH | 243.4 | RU090701 | 7/1/09 10:10 | ISOK | 530 | 2.1 | 2.53 | 4.77 | 10216.41 | 41.98 | 1.63 | 3.08 | 6582.11 | 27.04 |
| RUSH | 243.4 | RU090712 | 7/12/09 10:00 | ISOK | 433 | 1.5 | 0.83 | 1.92 | 2933.11 | 12.05 | 1.43 | 3.30 | 5053.43 | 20.76 |
| RUSH | 243.4 | RU090715 | 7/15/09 10:55 | ISOK | 311 | 1.4 | 0.53 | 1.70 | 2405.71 | 9.88 | 0.63 | 2.03 | 2859.62 | 11.75 |
| RUSH | 243.4 | RU090718 | 7/18/09 9:30 | ISOK | 415 | 1.3 | 1.73 | 4.17 | 5503.79 | 22.61 | 0.33 | 0.80 | 1049.86 | 4.31 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052201 | 5/23/09 0:00 | ISCO/SEQ. TIME | 390 | 6.9 | 10.03 | 28.21 | 194735.77 | 800.10 | 2.23 | 4.48 | 30897.02 | 126.94 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052301 | 5/23/09 6:00 | ISCO/SEQ. TIME | 426 | 6.5 | 11.33 | 29.20 | 190449.50 | 782.49 | 2.43 | 4.47 | 29148.15 | 119.76 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052302 | 5/23/09 12:00 | ISCO/SEQ. TIME | 385 | 5.9 | 9.73 | 27.71 | 162187.14 | 666.37 | 2.53 | 4.91 | 28713.72 | 117.97 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090523A | 5/23/09 17:05 | ISCO/MANUAL | 394 | 6.8 | 9.13 | 25.34 | 171282.70 | 703.74 | 1.83 | 3.94 | 26598.11 | 109.28 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052303 | 5/23/09 18:00 | ISCO/SEQ. TIME | 164 | 7.0 | 3.63 | 24.17 | 169056.92 | 694.59 | 1.23 | 5.37 | 37576.40 | 154.39 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052304 | 5/24/09 0:00 | ISCO/SEQ. TIME | 490 | 8.0 | 12.03 | 26.90 | 215505.85 | 885.44 | 2.63 | 4.30 | 34448.98 | 141.54 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052401 | 5/24/09 6:00 | ISCO/SEQ. TIME | 393 | 8.4 | 12.03 | 33.72 | 282567.90 | 1160.97 | 2.63 | 4.97 | 41615.66 | 170.98 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052402 | 5/24/09 12:00 | ISCO/SEQ. TIME | 396 | 8.0 | 14.33 | 40.00 | 320819.69 | 1318.13 | 2.73 | 5.07 | 40645.60 | 167.00 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052403 | 5/24/09 18:00 | ISCO/SEQ. TIME | 386 | 8.5 | 13.33 | 38.14 | 323945.34 | 1330.97 | 3.13 | 5.68 | 48240.52 | 198.20 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052404 | 5/25/09 0:00 | ISCO/SEQ. TIME | 384 | 9.0 | 13.63 | 39.22 | 352947.67 | 1450.14 | 3.23 | 5.83 | 52479.95 | 215.62 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090525A | 5/25/09 11:20 | ISCO/MANUAL | 381 | 8.2 | 16.63 | 48.41 | 398274.07 | 1636.37 | 3.03 | 5.60 | 46084.16 | 189.34 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052502 | 5/25/09 12:00 | ISCO/SEQ. TIME | 412 | 8.3 | 13.23 | 35.41 | 293075.85 | 1204.14 | 2.83 | 5.06 | 41839.35 | 171.90 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052503 | 5/25/09 18:00 | ISCO/SEQ. TIME | 515 | 7.8 | 18.73 | 40.21 | 312427.19 | 1283.65 | 3.33 | 4.85 | 37706.32 | 154.92 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052504 | 5/26/09 0:00 | ISCO/SEQ. TIME | 373 | 7.7 | 10.33 | 30.44 | 234085.20 | 961.77 | 2.43 | 4.88 | 37509.16 | 154.11 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052601 | 5/26/09 6:00 | ISCO/SEQ. TIME | 405 | 7.3 | 12.23 | 33.26 | 243833.71 | 1001.83 | 1.93 | 4.00 | 29301.16 | 120.39 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090526A | 5/26/09 11:30 | ISCO/MANUAL | 439 | 5.3 | 10.83 | 27.03 | 144115.60 | 592.12 | 1.93 | 3.81 | 20316.64 | 83.47 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052603 | 5/26/09 18:00 | ISCO/SEQ. TIME | 519 | 6.8 | 12.73 | 26.87 | 184007.89 | 756.02 | 2.13 | 3.66 | 25086.76 | 103.07 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052604 | 5/27/09 0:00 | ISCO/SEQ. TIME | 375 | 7.4 | 9.23 | 26.97 | 199603.06 | 820.10 | 1.93 | 4.19 | 31001.43 | 127.37 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RUSH ISCOST | 243.4 | ISCOST-RU09052702 | 5/27/09 12:00 | ISCO/SEQ. TIME | 412 | 5.7 | 8.43 | 22.29 | 127312.15 | 523.08 | 1.63 | 3.59 | 20499.28 | 84.22 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090527A | 5/27/09 12:15 | ISCO/MANUAL | 353 | 5.6 | 7.53 | 23.27 | 130241.17 | 535.11 | 1.13 | 3.21 | 17959.41 | 73.79 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052703 | 5/27/09 18:00 | ISCO/SEQ. TIME | 363 | 6.8 | 7.63 | 22.92 | 155983.85 | 640.88 | 1.13 | 3.16 | 21536.96 | 88.49 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052704 | 5/28/09 0:00 | ISCO/SEQ. TIME | 369 | 7.8 | 7.13 | 21.01 | 163542.31 | 671.94 | 1.83 | 4.09 | 31872.22 | 130.95 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052801 | 5/28/09 6:00 | ISCO/SEQ. TIME | 394 | 7.4 | 7.63 | 21.06 | 156635.58 | 643.56 | 1.53 | 3.55 | 26425.45 | 108.57 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090528A | 5/28/09 9:40 | ISCO/MANUAL | 439 | 6.6 | 12.13 | 30.37 | 201901.11 | 829.54 | 1.83 | 3.70 | 24573.87 | 100.97 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052802 | 5/28/09 12:00 | ISCO/SEQ. TIME | 446 | 6.2 | 8.23 | 20.03 | 124252.30 | 510.51 | 2.13 | 4.00 | 24825.99 | 102.00 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052902 | 5/29/09 12:00 | ISCO/SEQ. TIME | 474 | 6.7 | 12.23 | 28.31 | 190964.86 | 784.61 | 2.03 | 3.75 | 25322.44 | 104.04 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090529A | 5/29/09 13:35 | ISCO/MANUAL | 507 | 7.1 | 11.13 | 23.97 | 169570.53 | 696.70 | 2.23 | 3.81 | 26964.65 | 110.79 |
| RUSH ISCOST | 243.4 | ISCOST-RU09052903 | 5/29/09 18:00 | ISCO/SEQ. TIME | 388 | 7.5 | 9.13 | 25.75 | 193974.88 | 796.97 | 2.53 | 4.88 | 36765.47 | 151.06 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053001 | 5/30/09 6:00 | ISCO/SEQ. TIME | 402 | 8.5 | 10.73 | 29.31 | 248911.57 | 1022.69 | 2.13 | 4.26 | 36221.29 | 148.82 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053002 | 5/30/09 12:00 | ISCO/SEQ. TIME | 371 | 7.3 | 9.23 | 27.27 | 197749.70 | 812.48 | 0.83 | 2.72 | 19752.49 | 81.16 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053003 | 5/30/09 18:00 | ISCO/SEQ. TIME | 332 | 8.2 | 8.93 | 29.54 | 242471.94 | 996.23 | 1.83 | 4.37 | 35889.50 | 147.46 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053004 | 5/31/09 0:00 | ISCO/SEQ. TIME | 381 | 9.6 | 11.63 | 33.63 | 321172.71 | 1319.58 | 2.03 | 4.28 | 40877.42 | 167.95 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053101 | 5/31/09 6:00 | ISCO/SEQ. TIME | 402 | 9.7 | 15.43 | 42.48 | 413164.78 | 1697.55 | 3.13 | 5.52 | 53665.68 | 220.49 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053102 | 5/31/09 12:00 | ISCO/SEQ. TIME | 365 | 8.3 | 9.03 | 27.11 | 225107.70 | 924.89 | 2.23 | 4.67 | 38804.92 | 159.44 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090531A | 5/31/09 16:50 | ISCO/MANUAL | 377 | 8.4 | 11.13 | 32.50 | 273532.28 | 1123.85 | 2.13 | 4.44 | 37387.28 | 153.61 |
| RUSH ISCOST | 243.4 | ISCOST-RU09053103 | 5/31/09 18:00 | ISCO/SEQ. TIME | 337 | 8.8 | 9.93 | 32.43 | 284056.06 | 1167.08 | 2.53 | 5.38 | 47093.43 | 193.49 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060101 | 6/1/09 6:00 | ISCO/SEQ. TIME | 400 | 9.7 | 11.13 | 30.58 | 296455.29 | 1218.03 | 2.43 | 4.66 | 45128.53 | 185.42 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090601A | 6/1/09 13:10 | ISCO/MANUAL | 483 | 9.0 | 12.73 | 28.93 | 259732.67 | 1067.15 | 2.33 | 4.03 | 36144.71 | 148.51 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060103 | 6/1/09 18:00 | ISCO/SEQ. TIME | 387 | 8.4 | 9.03 | 25.53 | 215582.17 | 885.75 | 1.13 | 3.07 | 25905.33 | 106.44 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060104 | 6/2/09 0:00 | ISCO/SEQ. TIME | 405 | 8.1 | 7.43 | 19.91 | 160328.95 | 658.73 | 1.93 | 4.00 | 32186.60 | 132.24 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060201 | 6/2/09 6:00 | ISCO/SEQ. TIME | 413 | 7.5 | 7.63 | 20.05 | 149756.58 | 615.30 | 1.73 | 3.71 | 27678.45 | 113.72 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090602A | 6/2/09 11:00 | ISCO/MANUAL | 429 | 5.8 | 10.13 | 25.84 | 149314.57 | 613.48 | 1.93 | 3.86 | 22317.25 | 91.69 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060202 | 6/2/09 12:00 | ISCO/SEQ. TIME | 394 | 6.1 | 7.93 | 21.91 | 134664.45 | 553.29 | 1.23 | 3.17 | 19473.70 | 80.01 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060203 | 6/2/09 18:00 | ISCO/SEQ. TIME | 361 | 6.8 | 6.63 | 19.93 | 135232.68 | 555.62 | 2.13 | 4.57 | 30994.93 | 127.35 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060204 | 6/3/09 0:00 | ISCO/SEQ. TIME | 393 | 8.2 | 6.83 | 18.82 | 154859.03 | 636.26 | 1.73 | 3.81 | 31381.39 | 128.93 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060301 | 6/3/09 6:00 | ISCO/SEQ. TIME | 402 | 7.4 | 6.43 | 17.26 | 127244.76 | 522.80 | 1.03 | 2.89 | 21285.21 | 87.45 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090603A | 6/3/09 15:30 | ISCO/MANUAL | 483 | 5.6 | 10.93 | 24.73 | 138602.17 | 569.47 | 1.73 | 3.40 | 19056.60 | 78.30 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060303 | 6/3/09 18:00 | ISCO/SEQ. TIME | 415 | 7.1 | 8.63 | 22.67 | 160471.74 | 659.32 | 1.63 | 3.57 | 25307.67 | 103.98 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060304B | 6/4/09 0:00 | ISCO/SEQ. TIME | 137 | 9.0 | 37.13 | 304.52 | 2731022.23 | 11220.79 | 9.13 | 35.15 | 315246.79 | 1295.24 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060304A | 6/4/09 0:00 | ISCO/SEQ. TIME | 156 | 9.0 | 39.83 | 286.84 | 2572409.80 | 10569.11 | 9.63 | 32.68 | 293068.60 | 1204.11 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060401 | 6/4/09 6:00 | ISCO/SEQ. TIME | 421 | 8.2 | 44.23 | 117.58 | 958843.89 | 3939.55 | 9.63 | 13.11 | 106942.45 | 439.39 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060402 | 6/4/09 12:00 | ISCO/SEQ. TIME | 398 | 6.7 | 22.03 | 61.59 | 415185.43 | 1705.85 | 7.53 | 11.12 | 74980.88 | 308.07 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060403 | 6/4/09 18:00 | ISCO/SEQ. TIME | 373 | 8.2 | 13.33 | 39.50 | 324923.17 | 1334.99 | 2.93 | 5.55 | 45674.98 | 187.66 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060404 | 6/5/09 0:00 | ISCO/SEQ. TIME | 414 | 8.2 | 13.43 | 35.78 | 294028.83 | 1208.06 | 3.23 | 5.53 | 45402.13 | 186.54 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060501 | 6/5/09 6:00 | ISCO/SEQ. TIME | 418 | 7.7 | 12.63 | 33.28 | 255748.93 | 1050.78 | 2.13 | 4.16 | 31992.47 | 131.45 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060502 | 6/5/09 12:00 | ISCO/SEQ. TIME | 391 | 6.8 | 9.53 | 26.70 | 182159.30 | 748.43 | 2.53 | 4.86 | 33126.85 | 136.11 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060503 | 6/5/09 19:00 | ISCO/SEQ. TIME | 393 | 7.3 | 10.03 | 27.99 | 204614.06 | 840.69 | 2.03 | 4.20 | 30687.04 | 126.08 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060504 | 6/5/09 21:00 | ISCO/SEQ. TIME | 400 | 8.0 | 6.63 | 17.91 | 142915.17 | 587.19 | 2.13 | 4.28 | 34133.07 | 140.24 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060505 | 6/5/09 23:00 | ISCO/SEQ. TIME | 395 | 8.7 | 7.13 | 19.58 | 169737.31 | 697.39 | 2.23 | 4.44 | 38496.46 | 158.17 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060601 | 6/6/09 1:00 | ISCO/SEQ. TIME | 395 | 8.7 | 21.83 | 61.49 | 533943.65 | 2193.78 | 3.53 | 6.10 | 52936.79 | 217.50 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060602 | 6/6/09 3:00 | ISCO/SEQ. TIME | 394 | 8.6 | 31.93 | 90.53 | 781995.07 | 3212.94 | 3.23 | 5.72 | 49452.05 | 203.18 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060603 | 6/6/09 5:00 | ISCO/SEQ. TIME | 396 | 8.6 | 37.43 | 105.71 | 905945.78 | 3722.21 | 4.23 | 6.98 | 59779.61 | 245.61 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060604 | 6/6/09 7:00 | ISCO/SEQ. TIME | 407 | 8.2 | 33.43 | 91.76 | 755039.02 | 3102.18 | 4.53 | 7.20 | 59252.43 | 243.45 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060605 | 6/6/09 9:00 | ISCO/SEQ. TIME | 410 | 8.0 | 28.03 | 76.25 | 608165.80 | 2498.73 | 3.63 | 6.05 | 48293.56 | 198.42 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060606 | 6/6/09 11:00 | ISCO/SEQ. TIME | 406 | 7.1 | 22.23 | 60.92 | 433631.38 | 1781.64 | 3.53 | 5.97 | 42530.83 | 174.74 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060607 | 6/6/09 13:00 | ISCO/SEQ. TIME | 383 | 7.4 | 19.23 | 55.80 | 411718.66 | 1691.60 | 2.63 | 5.05 | 37296.10 | 153.24 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060608 | 6/6/09 15:00 | ISCO/SEQ. TIME | 406 | 7.6 | 18.03 | 49.27 | 374571.01 | 1538.98 | 2.53 | 4.73 | 35998.58 | 147.91 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060609 | 6/6/09 17:00 | ISCO/SEQ. TIME | 412 | 7.5 | 18.03 | 48.54 | 366185.04 | 1504.52 | 2.73 | 4.93 | 37220.12 | 152.92 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060610 | 6/6/09 19:00 | ISCO/SEQ. TIME | 407 | 8.0 | 15.33 | 41.67 | 334725.01 | 1375.26 | 2.63 | 4.85 | 38964.57 | 160.09 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060611 | 6/6/09 21:00 | ISCO/SEQ. TIME | 414 | 8.0 | 14.63 | 39.05 | 314223.45 | 1291.03 | 2.33 | 4.43 | 35655.36 | 146.50 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060612 | 6/6/09 23:00 | ISCO/SEQ. TIME | 422 | 7.6 | 13.73 | 35.89 | 272603.91 | 1120.03 | 2.83 | 4.97 | 37776.58 | 155.21 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060701 | 6/7/09 1:00 | ISCO/SEQ. TIME | 423 | 7.6 | 13.33 | 34.74 | 264783.92 | 1087.90 | 2.53 | 4.61 | 35126.86 | 144.32 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060702 | 6/7/09 3:00 | ISCO/SEQ. TIME | 428 | 7.6 | 12.13 | 31.17 | 238396.03 | 979.48 | 1.83 | 3.75 | 28683.67 | 117.85 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060703 | 6/7/09 5:00 | ISCO/SEQ. TIME | 428 | 7.4 | 11.33 | 29.06 | 214561.30 | 881.56 | 2.03 | 3.99 | 29423.32 | 120.89 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060704 | 6/7/09 7:00 | ISCO/SEQ. TIME | 433 | 7.2 | 9.93 | 25.07 | 180797.20 | 742.83 | 2.13 | 4.07 | 29374.27 | 120.69 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060705 | 6/7/09 9:00 | ISCO/SEQ. TIME | 424 | 6.7 | 11.03 | 28.55 | 190260.24 | 781.71 | 1.43 | 3.30 | 21963.39 | 90.24 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060706 | 6/7/09 11:00 | ISCO/SEQ. TIME | 425 | 6.5 | 9.93 | 25.56 | 164991.57 | 677.89 | 2.43 | 4.48 | 28891.45 | 118.70 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060707 | 6/7/09 15:00 | ISCO/SEQ. TIME | 378 | 6.5 | 9.93 | 28.83 | 187668.89 | 771.06 | 2.13 | 4.43 | 28861.71 | 118.58 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060708 | 6/7/09 21:00 | ISCO/SEQ. TIME | 405 | 6.6 | 8.33 | 22.41 | 148229.87 | 609.02 | 2.13 | 4.25 | 28078.52 | 115.36 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060801 | 6/8/09 3:00 | ISCO/SEQ. TIME | 446 | 6.0 | 9.53 | 23.31 | 138907.15 | 570.72 | 4.33 | 6.49 | 38644.46 | 158.78 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060802 | 6/8/09 9:00 | ISCO/SEQ. TIME | 445 | 5.5 | 7.13 | 17.29 | 95180.72 | 391.06 | 1.23 | 2.99 | 16452.62 | 67.60 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060803 | 6/8/09 15:00 | ISCO/SEQ. TIME | 419 | 5.7 | 6.23 | 15.99 | 91479.83 | 375.86 | 1.83 | 3.80 | 21716.64 | 89.23 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060804 | 6/8/09 21:00 | ISCO/SEQ. TIME | 450 | 5.9 | 7.13 | 17.09 | 101232.41 | 415.93 | 1.03 | 2.75 | 16286.88 | 66.92 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060901 | 6/9/09 3:00 | ISCO/SEQ. TIME | 473 | 5.2 | 8.33 | 19.08 | 100107.86 | 411.31 | 1.73 | 3.44 | 18041.81 | 74.13 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060902 | 6/9/09 9:00 | ISCO/SEQ. TIME | 485 | 4.8 | 8.03 | 17.89 | 85908.07 | 352.97 | 1.53 | 3.19 | 15294.61 | 62.84 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RUSH ISCOST | 243.4 | ISCOST-RU09060903 | 6/9/09 15:00 | ISCO/SEQ. TIME | 435 | 4.9 | 6.93 | 17.19 | 83959.48 | 344.96 | 1.43 | 3.25 | 15887.02 | 65.27 |
| RUSH ISCOST | 243.4 | ISCOST-RU09060904 | 6/9/09 21:00 | ISCO/SEQ. TIME | 456 | 5.2 | 7.33 | 17.35 | 90209.95 | 370.64 | 1.03 | 2.73 | 14217.84 | 58.42 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061001 | 6/10/09 3:00 | ISCO/SEQ. TIME | 471 | 4.8 | 6.53 | 14.86 | 71330.39 | 293.07 | 1.43 | 3.13 | 15004.78 | 61.65 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061002 | 6/10/09 9:00 | ISCO/SEQ. TIME | 427 | 4.4 | 4.43 | 10.93 | 47577.16 | 195.48 | 1.33 | 3.17 | 13779.86 | 56.62 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090610A | 6/10/09 14:50 | ISCO/MANUAL | 459 | 4.4 | 7.73 | 18.21 | 80387.29 | 330.28 | 1.23 | 2.95 | 13004.71 | 53.43 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061003 | 6/10/09 15:00 | ISCO/SEQ. TIME | 376 | 4.3 | 7.23 | 20.90 | 90291.71 | 370.98 | 1.13 | 3.11 | 13435.58 | 55.20 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061004 | 6/10/09 21:00 | ISCO/SEQ. TIME | 392 | 4.5 | 5.73 | 15.71 | 71165.57 | 292.39 | 1.13 | 3.05 | 13811.50 | 56.75 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061101 | 6/11/09 3:00 | ISCO/SEQ. TIME | 415 | 4.5 | 5.13 | 13.17 | 58985.08 | 242.35 | 1.33 | 3.21 | 14383.49 | 59.10 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061102 | 6/11/09 9:00 | ISCO/SEQ. TIME | 415 | 4.1 | 4.93 | 12.62 | 52168.45 | 214.34 | 3.23 | 5.52 | 22794.41 | 93.65 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061103 | 6/11/09 15:00 | ISCO/SEQ. TIME | 401 | 4.0 | 4.33 | 11.41 | 45770.39 | 188.05 | 1.23 | 3.14 | 12606.58 | 51.80 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061104 | 6/11/09 21:00 | ISCO/SEQ. TIME | 408 | 4.1 | 3.93 | 10.09 | 41056.97 | 168.69 | 1.73 | 3.73 | 15181.76 | 62.38 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061201 | 6/12/09 3:00 | ISCO/SEQ. TIME | 426 | 4.0 | 3.83 | 9.37 | 37335.37 | 153.40 | 1.93 | 3.88 | 15453.13 | 63.49 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061202 | 6/12/09 9:00 | ISCO/SEQ. TIME | 434 | 3.7 | 5.43 | 13.34 | 49131.44 | 201.86 | 5.43 | 7.90 | 29092.49 | 119.53 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090612A | 6/12/09 14:05 | ISCO/MANUAL | 434 | 3.7 | 5.53 | 13.60 | 49823.92 | 204.71 | 1.33 | 3.14 | 11507.65 | 47.28 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061203 | 6/12/09 15:00 | ISCO/SEQ. TIME | 424 | 3.7 | 4.53 | 11.28 | 41678.39 | 171.24 | 0.93 | 2.70 | 9984.04 | 41.02 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061204 | 6/12/09 21:00 | ISCO/SEQ. TIME | 434 | 3.8 | 4.13 | 9.96 | 38075.41 | 156.44 | 1.23 | 3.02 | 11558.35 | 47.49 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061301 | 6/13/09 3:00 | ISCO/SEQ. TIME | 444 | 3.7 | 3.63 | 8.45 | 31105.20 | 127.80 | 1.43 | 3.22 | 11845.66 | 48.67 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061302 | 6/13/09 9:00 | ISCO/SEQ. TIME | 327 | 3.4 | 3.73 | 12.09 | 41705.77 | 171.35 | 1.23 | 3.49 | 12041.15 | 49.47 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061303 | 6/13/09 15:00 | ISCO/SEQ. TIME | 408 | 3.4 | 3.63 | 9.26 | 31350.27 | 128.81 | 0.93 | 2.74 | 9288.07 | 38.16 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061304 | 6/13/09 21:00 | ISCO/SEQ. TIME | 412 | 3.7 | 2.13 | 5.07 | 18849.30 | 77.45 | 1.33 | 3.22 | 11989.36 | 49.26 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061401 | 6/14/09 3:00 | ISCO/SEQ. TIME | 424 | 3.7 | 4.53 | 11.28 | 41219.21 | 169.35 | 1.13 | 2.94 | 10742.12 | 44.14 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061402 | 6/14/09 9:00 | ISCO/SEQ. TIME | 423 | 3.4 | 3.73 | 9.18 | 31117.50 | 127.85 | 0.73 | 2.47 | 8363.24 | 34.36 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061403 | 6/14/09 15:00 | ISCO/SEQ. TIME | 420 | 3.5 | 3.33 | 8.17 | 28283.88 | 116.21 | 1.43 | 3.31 | 11458.68 | 47.08 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061404 | 6/14/09 21:00 | ISCO/SEQ. TIME | 437 | 3.6 | 2.83 | 6.54 | 23841.79 | 97.96 | 1.13 | 2.90 | 10572.76 | 43.44 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061501 | 6/15/09 3:00 | ISCO/SEQ. TIME | 408 | 3.5 | 3.73 | 9.54 | 33046.06 | 135.77 | 2.03 | 4.10 | 14209.08 | 58.38 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061502 | 6/15/09 9:00 | ISCO/SEQ. TIME | 427 | 3.3 | 4.63 | 11.46 | 37872.35 | 155.60 | 1.03 | 2.81 | 9294.51 | 38.19 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090615 | 6/15/09 11:40 | ISCO/MANUAL | 438 | 3.2 | 6.43 | 15.78 | 50784.66 | 208.66 | 1.13 | 2.90 | 9321.12 | 38.30 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061503 | 6/15/09 15:00 | ISCO/SEQ. TIME | 423 | 3.3 | 4.13 | 10.24 | 33756.21 | 138.69 | 1.43 | 3.30 | 10875.31 | 44.68 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061504 | 6/15/09 21:00 | ISCO/SEQ. TIME | 444 | 3.4 | 3.83 | 8.96 | 30565.21 | 125.58 | 0.93 | 2.65 | 9046.47 | 37.17 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061601 | 6/16/09 3:00 | ISCO/SEQ. TIME | 427 | 3.4 | 5.63 | 14.09 | 47404.86 | 194.77 | 1.13 | 2.93 | 9853.12 | 40.48 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061602 | 6/16/09 9:00 | ISCO/SEQ. TIME | 462 | 3.1 | 4.33 | 9.80 | 30583.85 | 125.66 | 0.63 | 2.28 | 7127.05 | 29.28 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061603 | 6/16/09 15:00 | ISCO/SEQ. TIME | 412 | 3.0 | 3.83 | 9.71 | 29108.77 | 119.60 | 1.23 | 3.10 | 9290.15 | 38.17 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061604 | 6/16/09 21:00 | ISCO/SEQ. TIME | 420 | 3.1 | 3.63 | 8.98 | 28106.54 | 115.48 | 1.13 | 2.95 | 9240.55 | 37.97 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061701 | 6/17/09 3:00 | ISCO/SEQ. TIME | 440 | 3.5 | 11.93 | 29.78 | 103526.79 | 425.35 | 3.43 | 5.52 | 19194.61 | 78.86 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061702 | 6/17/09 9:00 | ISCO/SEQ. TIME | 454 | 3.3 | 8.53 | 20.41 | 67792.15 | 278.53 | 2.33 | 4.18 | 13890.24 | 57.07 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061703 | 6/17/09 15:00 | ISCO/SEQ. TIME | 435 | 3.3 | 4.13 | 9.94 | 32900.74 | 135.18 | 2.03 | 3.95 | 13067.18 | 53.69 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061704 | 6/17/09 21:00 | ISCO/SEQ. TIME | 426 | 3.3 | 3.43 | 8.31 | 27274.40 | 112.06 | 1.43 | 3.29 | 10786.20 | 44.32 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061801 | 6/18/09 3:00 | ISCO/SEQ. TIME | 434 | 3.3 | 4.33 | 10.48 | 34197.62 | 140.51 | 1.13 | 2.91 | 9488.51 | 38.98 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061802 | 6/18/09 9:00 | ISCO/SEQ. TIME | 441 | 3.2 | 3.43 | 8.00 | 25849.89 | 106.21 | 1.03 | 2.77 | 8956.22 | 36.80 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061803 | 6/18/09 15:00 | ISCO/SEQ. TIME | 398 | 3.1 | 2.33 | 5.84 | 18188.03 | 74.73 | 1.73 | 3.79 | 11795.84 | 48.46 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061804 | 6/18/09 21:00 | ISCO/SEQ. TIME | 418 | 3.1 | 3.73 | 9.29 | 28502.08 | 117.10 | 2.03 | 4.04 | 12396.32 | 50.93 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061901 | 6/19/09 3:00 | ISCO/SEQ. TIME | 427 | 3.1 | 3.13 | 7.50 | 23034.28 | 94.64 | 1.13 | 2.93 | 8997.76 | 36.97 |
| RUSH ISCOST | 243.4 | ISCOST-RU09061902 | 6/19/09 9:00 | ISCO/SEQ. TIME | 450 | 3.1 | 2.63 | 5.83 | 17837.91 | 73.29 | 1.73 | 3.53 | 10816.42 | 44.44 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062003 | 6/20/09 16:00 | ISCO/SEQ. TIME | 433 | 2.9 | 3.23 | 7.65 | 22178.68 | 91.12 | 1.53 | 3.38 | 9794.14 | 40.24 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062004 | 6/20/09 22:00 | ISCO/SEQ. TIME | 430 | 3.0 | 2.23 | 5.08 | 15076.75 | 61.94 | 0.53 | 2.22 | 6576.04 | 27.02 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062101 | 6/21/09 4:00 | ISCO/SEQ. TIME | 437 | 2.9 | 3.53 | 8.34 | 24298.92 | 99.84 | 0.93 | 2.67 | 7773.52 | 31.94 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062102 | 6/21/09 10:00 | ISCO/SEQ. TIME | 445 | 2.9 | 3.63 | 8.43 | 24242.56 | 99.60 | 0.83 | 2.54 | 7292.40 | 29.96 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090621 | 6/21/09 13:35 | ISCO/MANUAL | 391 | 2.8 | 2.33 | 5.96 | 16936.23 | 69.58 | 0.23 | 1.89 | 5384.36 | 22.12 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062103 | 6/21/09 16:00 | ISCO/SEQ. TIME | 425 | 3.0 | 2.73 | 6.48 | 19191.17 | 78.85 | 1.03 | 2.82 | 8345.96 | 34.29 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062104 | 6/21/09 22:00 | ISCO/SEQ. TIME | 451 | 3.0 | 2.13 | 4.56 | 13491.02 | 55.43 | 1.33 | 3.08 | 9112.64 | 37.44 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062201 | 6/22/09 4:00 | ISCO/SEQ. TIME | 450 | 3.0 | 2.43 | 5.33 | 15918.20 | 65.40 | 1.13 | 2.86 | 8553.07 | 35.14 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062202 | 6/22/09 10:00 | ISCO/SEQ. TIME | 448 | 2.9 | 1.93 | 4.10 | 12023.45 | 49.40 | 0.83 | 2.53 | 7427.33 | 30.52 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062203 | 6/22/09 16:00 | ISCO/SEQ. TIME | 422 | 2.9 | 2.63 | 6.26 | 17918.29 | 73.62 | 1.73 | 3.66 | 10474.83 | 43.04 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062204 | 6/22/09 22:00 | ISCO/SEQ. TIME | 444 | 2.8 | 1.53 | 3.12 | 8836.25 | 36.30 | 1.33 | 3.11 | 8782.29 | 36.08 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062301 | 6/23/09 4:00 | ISCO/SEQ. TIME | 467 | 2.8 | 3.23 | 7.03 | 19772.25 | 81.24 | 1.33 | 3.03 | 8520.59 | 35.01 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062302 | 6/23/09 10:00 | ISCO/SEQ. TIME | 466 | 2.8 | 1.83 | 3.67 | 10310.36 | 42.36 | 1.13 | 2.82 | 7924.83 | 32.56 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090623 | 6/23/09 14:25 | ISCO/MANUAL | 395 | 2.7 | 1.43 | 3.32 | 9123.00 | 37.48 | 1.83 | 3.93 | 10796.13 | 44.36 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062303 | 6/23/09 16:00 | ISCO/SEQ. TIME | 398 | 2.7 | 2.23 | 5.55 | 15187.93 | 62.40 | 1.33 | 3.28 | 8968.29 | 36.85 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062304 | 6/23/09 22:00 | ISCO/SEQ. TIME | 438 | 2.7 | 3.03 | 7.04 | 18944.12 | 77.83 | 1.33 | 3.13 | 8417.65 | 34.59 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062401 | 6/24/09 4:00 | ISCO/SEQ. TIME | 457 | 2.7 | 2.73 | 5.97 | 16114.46 | 66.21 | 0.83 | 2.51 | 6777.33 | 27.85 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062402 | 6/24/09 10:00 | ISCO/SEQ. TIME | 463 | 2.7 | 3.23 | 7.10 | 19254.14 | 79.11 | 0.83 | 2.50 | 6777.92 | 27.85 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062403 | 6/24/09 16:00 | ISCO/SEQ. TIME | 381 | 2.6 | 2.93 | 7.91 | 20864.83 | 85.73 | 1.03 | 2.96 | 7807.95 | 32.08 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062404 | 6/24/09 22:00 | ISCO/SEQ. TIME | 360 | 2.7 | 2.43 | 6.85 | 18236.48 | 74.93 | 1.13 | 3.18 | 8464.23 | 34.78 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062501 | 6/25/09 4:00 | ISCO/SEQ. TIME | 387 | 2.6 | 2.63 | 6.90 | 18266.94 | 75.05 | 0.93 | 2.81 | 7433.78 | 30.54 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090625 | 6/25/09 15:50 | ISCO/MANUAL | 420 | 2.5 | 3.13 | 7.64 | 19408.36 | 79.74 | 0.53 | 2.23 | 5673.31 | 23.31 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062503 | 6/25/09 16:00 | ISCO/SEQ. TIME | 400 | 2.6 | 1.93 | 4.68 | 11982.80 | 49.23 | 1.83 | 3.90 | 9991.98 | 41.05 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062504 | 6/25/09 22:00 | ISCO/SEQ. TIME | 405 | 2.5 | 3.13 | 7.95 | 20089.23 | 82.54 | 1.03 | 2.88 | 7273.24 | 29.88 |

| Sample Location | Drainage Area at Site [km^2] | Sample Name | Sample Date and Time | Sampling Method | Sample Volume [mL] | Discharge Values [m3/s] | Inorganic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Inorganic [mg/l] | Adjusted Sediment Flux Inorganic [mg/sec] | Adjusted Specific Sediment Yield Inorganic [mg/sec/km^2] | Organic Sediment Adjusted [mg] | All Callibrated and Adjusted Sediment Concentration Data Organic [mg/l] | Adjusted Sediment Flux Organic [mg/sec] | Adjusted Specific Sediment Yield Organic [mg/sec/km^2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RUSH ISCOST | 243.4 | ISCOST-RU09062601 | 6/26/09 4:00 | ISCO/SEQ. TIME | 430 | 2.6 | 3.33 | 7.97 | 20688.14 | 85.00 | 0.83 | 2.57 | 6671.80 | 27.41 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062602 | 6/26/09 10:00 | ISCO/SEQ. TIME | 439 | 2.6 | 2.83 | 6.50 | 16790.13 | 68.98 | 1.43 | 3.24 | 8356.60 | 34.33 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062603 | 6/26/09 16:00 | ISCO/SEQ. TIME | 393 | 2.5 | 2.73 | 7.07 | 17689.39 | 72.68 | 1.03 | 2.92 | 7300.27 | 29.99 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062604 | 6/26/09 22:00 | ISCO/SEQ. TIME | 406 | 2.4 | 2.73 | 6.82 | 16661.74 | 68.46 | 1.43 | 3.37 | 8238.06 | 33.85 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062701 | 6/27/09 4:00 | ISCO/SEQ. TIME | 424 | 2.5 | 2.13 | 4.90 | 12214.00 | 50.18 | 1.13 | 2.94 | 7323.65 | 30.09 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062702 | 6/27/09 10:00 | ISCO/SEQ. TIME | 420 | 2.5 | 2.23 | 5.22 | 12856.65 | 52.82 | 1.63 | 3.55 | 8740.42 | 35.91 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090627 | 6/27/09 14:55 | ISCO/MANUAL | 425 | 2.4 | 2.83 | 6.74 | 15897.30 | 65.32 | 0.23 | 1.87 | 4407.47 | 18.11 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062703 | 6/27/09 16:00 | ISCO/SEQ. TIME | 330 | 2.4 | 2.23 | 6.85 | 16298.23 | 66.96 | 1.43 | 3.78 | 8985.15 | 36.92 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062704 | 6/27/09 22:00 | ISCO/SEQ. TIME | 349 | 2.3 | 2.43 | 7.09 | 16536.29 | 67.94 | 1.03 | 3.08 | 7195.10 | 29.56 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062801 | 6/28/09 4:00 | ISCO/SEQ. TIME | 375 | 2.3 | 2.23 | 5.94 | 13960.79 | 57.36 | 1.23 | 3.25 | 7633.57 | 31.36 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062802 | 6/28/09 10:00 | ISCO/SEQ. TIME | 281 | 2.3 | 2.53 | 9.38 | 21908.64 | 90.01 | 0.83 | 3.08 | 7200.48 | 29.58 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062902 | 6/29/09 10:00 | ISCO/SEQ. TIME | 251 | 2.3 | 1.93 | 7.90 | 17812.80 | 73.19 | 0.93 | 3.46 | 7803.54 | 32.06 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062903 | 6/29/09 16:00 | ISCO/SEQ. TIME | 340 | 2.2 | 2.63 | 7.96 | 17374.14 | 71.38 | 1.03 | 3.12 | 6818.70 | 28.02 |
| RUSH ISCOST | 243.4 | ISCOST-RU09062904 | 6/29/09 22:00 | ISCO/SEQ. TIME | 365 | 2.1 | 2.43 | 6.74 | 14371.07 | 59.05 | 1.13 | 3.16 | 6727.05 | 27.64 |
| RUSH ISCOST | 243.4 | ISCOST-RU09063001 | 6/30/09 4:00 | ISCO/SEQ. TIME | 417 | 2.2 | 2.43 | 5.81 | 12558.97 | 51.60 | 1.83 | 3.81 | 8233.14 | 33.83 |
| RUSH ISCOST | 243.4 | ISCOST-RU09063002 | 6/30/09 10:00 | ISCO/SEQ. TIME | 340 | 2.2 | 2.03 | 5.97 | 12957.72 | 53.24 | 1.13 | 3.27 | 7100.70 | 29.17 |
| RUSH ISCOST | 243.4 | ISCOST-RU09063003 | 6/30/09 16:00 | ISCO/SEQ. TIME | 333 | 2.1 | 1.33 | 3.74 | 7878.67 | 32.37 | 1.73 | 4.21 | 8870.72 | 36.45 |
| RUSH ISCOST | 243.4 | ISCOST-RU09063004 | 6/30/09 22:00 | ISCO/SEQ. TIME | 377 | 2.1 | 2.23 | 5.91 | 12172.15 | 50.01 | 1.03 | 2.97 | 6127.02 | 25.17 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070102 | 7/1/09 10:00 | ISCO/SEQ. TIME | 100 | 2.1 | 1.63 | 17.60 | 36913.58 | 151.66 | 0.43 | 3.76 | 7889.15 | 32.41 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090701 | 7/1/09 10:25 | ISCO/MANUAL | 370 | 2.1 | 3.73 | 10.60 | 22270.60 | 91.50 | -0.17 | 1.37 | 2869.95 | 11.79 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070103 | 7/1/09 16:00 | ISCO/SEQ. TIME | 347 | 2.0 | 1.83 | 5.18 | 10496.20 | 43.13 | 1.53 | 3.82 | 7729.76 | 31.76 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070104 | 7/1/09 22:00 | ISCO/SEQ. TIME | 378 | 2.0 | 1.63 | 4.10 | 8149.26 | 33.48 | 1.03 | 2.97 | 5901.21 | 24.25 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070201 | 7/2/09 4:00 | ISCO/SEQ. TIME | 415 | 2.0 | 2.43 | 5.84 | 11722.10 | 48.16 | 1.03 | 2.85 | 5715.54 | 23.48 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070202 | 7/2/09 10:00 | ISCO/SEQ. TIME | 405 | 2.0 | 1.93 | 4.61 | 9253.81 | 38.02 | 0.93 | 2.75 | 5525.94 | 22.70 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070203 | 7/2/09 16:00 | ISCO/SEQ. TIME | 370 | 1.9 | 1.93 | 5.12 | 9969.36 | 40.96 | 0.93 | 2.86 | 5575.68 | 22.91 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070204 | 7/2/09 22:00 | ISCO/SEQ. TIME | 384 | 1.9 | 1.83 | 4.61 | 8880.22 | 36.49 | 1.03 | 2.95 | 5676.90 | 23.32 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070301 | 7/3/09 4:00 | ISCO/SEQ. TIME | 410 | 1.9 | 2.13 | 5.09 | 9896.93 | 40.66 | 1.13 | 2.98 | 5798.26 | 23.82 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070302 | 7/3/09 10:00 | ISCO/SEQ. TIME | 405 | 1.9 | 1.73 | 4.05 | 7853.82 | 32.27 | 1.53 | 3.50 | 6778.30 | 27.85 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070303 | 7/3/09 16:00 | ISCO/SEQ. TIME | 380 | 1.9 | 1.83 | 4.67 | 8825.66 | 36.26 | 1.23 | 3.23 | 6101.69 | 25.07 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070304 | 7/3/09 22:00 | ISCO/SEQ. TIME | 371 | 1.9 | 1.63 | 4.19 | 7818.00 | 32.12 | 1.03 | 2.99 | 5585.84 | 22.95 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070401 | 7/4/09 4:00 | ISCO/SEQ. TIME | 415 | 1.9 | 2.73 | 6.65 | 12479.35 | 51.27 | 1.43 | 3.33 | 6250.36 | 25.68 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090704 | 7/4/09 9:45 | ISCO/MANUAL | 493 | 1.9 | 4.43 | 9.36 | 17915.77 | 73.61 | 0.53 | 2.14 | 4091.07 | 16.81 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070402 | 7/4/09 10:00 | ISCO/SEQ. TIME | 397 | 1.9 | 2.03 | 5.00 | 9406.27 | 38.65 | 1.13 | 3.03 | 5697.71 | 23.41 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070403 | 7/4/09 16:00 | ISCO/SEQ. TIME | 352 | 1.8 | 1.73 | 4.78 | 8761.25 | 36.00 | 0.83 | 2.78 | 5104.57 | 20.97 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070404 | 7/4/09 22:00 | ISCO/SEQ. TIME | 378 | 1.8 | 1.53 | 3.80 | 6852.91 | 28.16 | 1.03 | 2.97 | 5351.40 | 21.99 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070501 | 7/5/09 4:00 | ISCO/SEQ. TIME | 400 | 1.8 | 1.93 | 4.68 | 8515.05 | 34.99 | 1.73 | 3.77 | 6871.22 | 28.23 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070502 | 7/5/09 10:00 | ISCO/SEQ. TIME | 430 | 1.8 | 1.93 | 4.30 | 7845.65 | 32.23 | 1.03 | 2.80 | 5116.22 | 21.02 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070503 | 7/5/09 16:00 | ISCO/SEQ. TIME | 373 | 1.8 | 2.03 | 5.37 | 9612.62 | 39.49 | 0.83 | 2.72 | 4861.60 | 19.97 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070504 | 7/5/09 22:00 | ISCO/SEQ. TIME | 386 | 1.8 | 2.53 | 6.63 | 11923.34 | 48.99 | 1.33 | 3.33 | 5995.98 | 24.64 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070601 | 7/6/09 4:00 | ISCO/SEQ. TIME | 409 | 1.8 | 1.03 | 2.08 | 3802.99 | 15.63 | 1.23 | 3.11 | 5689.78 | 23.38 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070602 | 7/6/09 10:00 | ISCO/SEQ. TIME | 430 | 1.8 | 6.93 | 17.40 | 31399.41 | 129.01 | 3.03 | 5.15 | 9286.50 | 38.15 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090706 | 7/6/09 11:50 | ISCO/MANUAL | 439 | 1.8 | 2.23 | 4.96 | 9056.69 | 37.21 | 1.13 | 2.89 | 5277.68 | 21.68 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070603 | 7/6/09 13:30 | ISCO/SEQ. TIME | 109 | 1.8 | 0.93 | 8.85 | 15818.97 | 64.99 | 0.93 | 5.89 | 10529.37 | 43.26 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070603B | 7/6/09 16:00 | ISCO/SEQ. TIME | 387 | 1.8 | 1.73 | 4.28 | 7521.17 | 30.90 | 1.03 | 2.94 | 5163.56 | 21.22 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070604 | 7/6/09 21:00 | ISCO/SEQ. TIME | 404 | 1.7 | 0.93 | 1.84 | 3142.04 | 12.91 | 1.23 | 3.13 | 5357.03 | 22.01 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070701 | 7/7/09 3:00 | ISCO/SEQ. TIME | 414 | 1.7 | 1.73 | 3.95 | 6788.28 | 27.89 | 0.83 | 2.61 | 4479.65 | 18.41 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070702 | 7/7/09 9:00 | ISCO/SEQ. TIME | 424 | 1.7 | 1.43 | 3.04 | 5275.41 | 21.67 | 0.93 | 2.70 | 4685.12 | 19.25 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070703 | 7/7/09 15:00 | ISCO/SEQ. TIME | 375 | 1.7 | 0.83 | 1.74 | 2950.09 | 12.12 | 1.13 | 3.11 | 5292.35 | 21.74 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070704 | 7/7/09 21:00 | ISCO/SEQ. TIME | 384 | 1.7 | 1.83 | 4.61 | 7664.64 | 31.49 | 1.43 | 3.47 | 5771.65 | 23.71 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070801 | 7/8/09 3:00 | ISCO/SEQ. TIME | 400 | 1.7 | 2.43 | 6.09 | 10220.98 | 41.99 | 1.13 | 3.02 | 5071.19 | 20.84 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070802 | 7/8/09 9:00 | ISCO/SEQ. TIME | 411 | 1.7 | 1.13 | 2.34 | 3995.28 | 16.42 | 1.43 | 3.35 | 5718.37 | 23.49 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070803 | 7/8/09 15:00 | ISCO/SEQ. TIME | 395 | 1.7 | 1.53 | 3.61 | 6197.85 | 25.46 | 0.83 | 2.66 | 4563.57 | 18.75 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070804 | 7/8/09 21:00 | ISCO/SEQ. TIME | 396 | 1.7 | 1.43 | 3.31 | 5512.57 | 22.65 | 0.53 | 2.27 | 3781.63 | 15.54 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070901 | 7/9/09 3:00 | ISCO/SEQ. TIME | 429 | 1.6 | 2.63 | 6.15 | 10106.17 | 41.52 | 1.03 | 2.81 | 4612.24 | 18.95 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070902 | 7/9/09 9:00 | ISCO/SEQ. TIME | 442 | 1.6 | 1.93 | 4.16 | 6860.72 | 28.19 | 2.13 | 4.02 | 6633.41 | 27.25 |
| RUSH ISCOMC | 243.4 | ISCOMC-RU090709 | 7/9/09 13:20 | ISCO/MANUAL | 318 | 1.7 | 1.93 | 6.08 | 10049.54 | 41.29 | 0.63 | 2.59 | 4289.12 | 17.62 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070903 | 7/9/09 15:00 | ISCO/SEQ. TIME | 385 | 1.6 | 1.83 | 4.60 | 7494.25 | 30.79 | 0.73 | 2.55 | 4160.09 | 17.09 |
| RUSH ISCOST | 243.4 | ISCOST-RU09070904 | 7/9/09 21:00 | ISCO/SEQ. TIME | 345 | 1.6 | 1.83 | 5.22 | 8314.36 | 34.16 | 1.03 | 3.10 | 4940.29 | 20.30 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071001 | 7/10/09 3:00 | ISCO/SEQ. TIME | 348 | 1.6 | 2.13 | 6.14 | 9791.25 | 40.23 | 0.63 | 2.51 | 4002.19 | 16.44 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071002 | 7/10/09 9:00 | ISCO/SEQ. TIME | 378 | 1.6 | 0.73 | 1.42 | 2267.54 | 9.32 | 1.23 | 3.24 | 5173.06 | 21.25 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071003 | 7/10/09 15:00 | ISCO/SEQ. TIME | 299 | 1.6 | 2.03 | 6.89 | 10871.11 | 44.67 | 1.63 | 4.34 | 6850.38 | 28.15 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071004 | 7/10/09 21:00 | ISCO/SEQ. TIME | 185 | 1.5 | 1.23 | 6.73 | 10302.40 | 42.33 | 1.73 | 6.31 | 9649.80 | 39.65 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071101 | 7/11/09 3:00 | ISCO/SEQ. TIME | 126 | 1.5 | 1.43 | 12.03 | 18522.64 | 76.10 | 0.63 | 4.11 | 6337.03 | 26.04 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071102 | 7/11/09 9:00 | ISCO/SEQ. TIME | 160 | 1.6 | 0.33 | 1.57 | 2428.28 | 9.98 | 0.73 | 3.89 | 6038.26 | 24.81 |
| RUSH ISCOST | 243.4 | ISCOST-RU09071103 | 7/11/09 15:00 | ISCO/SEQ. TIME | 86 | 1.5 | 0.23 | 2.26 | 3449.92 | 14.17 | 1.03 | 7.63 | 11667.25 | 47.94 |